



Needham Center Development Plan

March 30, 2009

This study has been prepared under the direction of the Needham Planning Board with the guidance of the Needham Center Study Committee (NCSC) which consists of Town officials, representatives of local civic and business organizations, business owners, property owners and citizens.

It has been an exhaustive and deliberative process that began in October 2006 and has included numerous participants in meetings, work shops and public forums. The process has been open and collaborative with the focus on the best approach to revitalize Needham Center.

While the list of active participants is too numerous to mention here, we acknowledge the leadership of the NCSC under cochairs Bob Smart and Moe Handel, the Planning Board and Planning Director Lee Newman and her excellent staff.

Respectfully submitted,

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Introduction

Needham Center is at the geographic and symbolic center of town. This village center is at the focal point of a collection of residential neighborhoods with the attributes of easy access to Boston, pleasant green spaces and an excellent school system that have all made this a highly desirable community in which to live and work.

Needham Center's potential to become a vibrant center of the town's business, civic, cultural and social life is great. The intent of this Development Plan is to provide a cohesive vision and comprehensive plan from which the coordinated decision-making required by all involved stakeholders will follow.

Project Goals

The overarching goal of this plan is to unlock Needham Center's potential. This will create significant benefits for town residents, business and property owners and employees. At the same time, this plan protects adjacent residential neighborhoods from the impact of development and addresses current and future pressure on traffic and parking. To achieve this the Development Plan is designed to:

- Provide an overall master plan to guide public and private development of the built environment.
- Create a vibrant downtown with a diverse mix of goods, services and housing informed by

smart growth and transit-oriented development principles.

- Reduce regulatory barriers to good development.
- Provide incentives for the private sector to create public benefits.
- Create an attractive village environment character.
- Improve traffic flow and parking.
- Create a safer and enriched pedestrian experience.
- Improve environmental quality.
- Encourage new investment.
- Generate additional tax revenues for the Town.

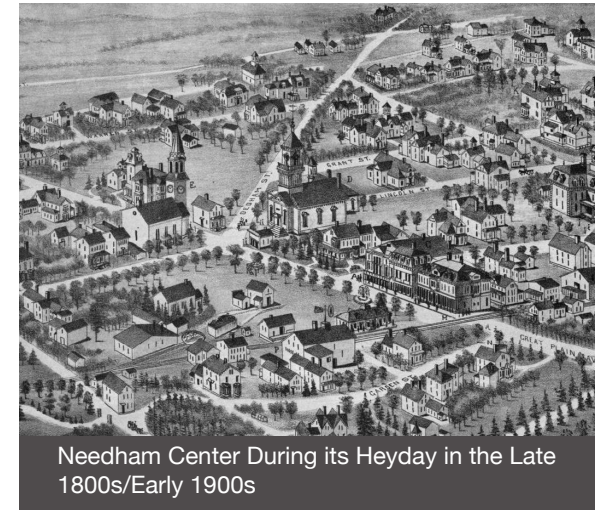
Needham Center Today

Needham Center is a much loved and used downtown but there are missed opportunities in the areas of the built environment, land use, traffic and parking that this plan addresses.

Two features stand out as attributes of Needham Center today. One is its "center focus", referring to a sense of place dominated by the civic presence of Town Hall and Common among the surrounding commercial properties. The second is the location of two commuter rail stations providing easy access to Boston.

Built Environment

During Needham Center's heyday, in the late 1800s/early 1900s, many beautifully designed



buildings of two and three stories, and even some of four stories, stood within a block of Town Hall and Common as evidenced in historical photographs. Yet today the built environment of Needham Center is dominated by one story buildings with nondescript or unattractive facades. Although there are pockets of attractive and pleasant streetscape, the built environment is further diminished by:

- Unattractive streetscape
- Sidewalks unfriendly to pedestrians
- Inconsistent building setbacks
- A lack of trees and greening
- Inadequate crosswalks
- Excessive numbers of curb cuts
- An abundance of parking lots fronting the street

EXECUTIVE SUMMARY |

Land Use

Needham Center is a serviceable downtown that is enjoyed. The most predominant use is retail followed by office. In addition there are the significant institutions of Town Hall and the Hospital. Downtown enjoys the benefit of open space at locations including Town Common, Greene's Field and Memorial Field. Needham Center suffers however from a lack of:

- Diversity in retail
- Community space for social and cultural events
- Evening and weekend activities
- Residential options

Market Analysis

A study of the market shows there is a demand for additional retail, office and residential space. In addition there is the opportunity for transit-oriented development (TOD) promoting mixed-use residential projects. The market analysis showed that the potential demand over the next five years is:

- Retail - 245,000 SF
- Office - 50,000 SF
- Residential - 168,000 SF

Underpinning this documented demand for additional development is the necessity of providing adequate traffic and parking capacity.

Zoning

Current zoning contributes to redevelopment barriers that exist in Needham Center. Some

properties have little room to grow, but most are already at or over their maximum development potential based upon current zoning. The uncertainty in the project approvals process itself is an additional obstacle to redevelopment. Changes to current zoning can address these barriers as well as create opportunities to encourage projects that complement a comprehensive vision for a revitalized downtown.

Subdistricts

Three zoning districts, each with its own character, compromise Needham Center today.

Needham Center Business District

This district is the hub of downtown with a central focus of Town Hall and Common. These two historic landmarks, along with Needham Center Station, give the defining character to this district. The Center District also has the most urban feel with the most consistent building setbacks at the edge of street front lot lines. This district can be enhanced as the visual and social focus of town by increasing density of development and taking advantage of Center Station for transit-oriented development projects.

Chestnut Street Business District

This zoning district includes two distinct areas, each with its own character: Lower Chestnut Street and Garden Street.



Lower Chestnut Street

The commercial area organized along Chestnut Street is dominated by Beth Israel Deaconess Hospital and Needham Junction Station. The Hospital is undergoing a significant expansion that will stimulate demand for additional office space nearby. Junction Station provides another opportunity for transit-oriented development projects.

Garden Street

Although it belongs to the same zoning district, this small area next to Center Station is completely separate from and of a completely different character than Chestnut Street. Its character is most influenced by the adjacent residential neighborhood.

Highland Avenue Business District

The predominant feature of this district is a collection of strip malls that are built up to the Highland Avenue frontage. Memorial Field and the adjacent high school, Needham Public Library and Rosemary Lake converge at the northern entry to this district. At its southern end, the historic Emery Grover building faces a collection of buildings consistently set back from Highland Avenue with landscaping. This zoning district serves as the entry into downtown.

Development Plan

The Development Plan is first and foremost a cohesive vision for the redevelopment of Needham Center, which lays the groundwork for a comprehensive plan addressing the built environment, land use, zoning, traffic and parking.

Village Concept

The vision for this plan reflects upon historic Needham Center and the traditional New England Village for inspiration and reinterprets it for contemporary life.

For more than two centuries the traditional New England villages thrived. At their best they were densely populated with two and three-story buildings housing a diverse mix of commercial, residential and civic uses. Economic, social and civic activities were centered in these town centers while outlying areas remained rural.

For the past hundred years, increasing reliance on automobiles and zoning laws that fostered it, have promoted a suburban development pattern that dispersed commercial development and took away from the focus and livability of the town center.

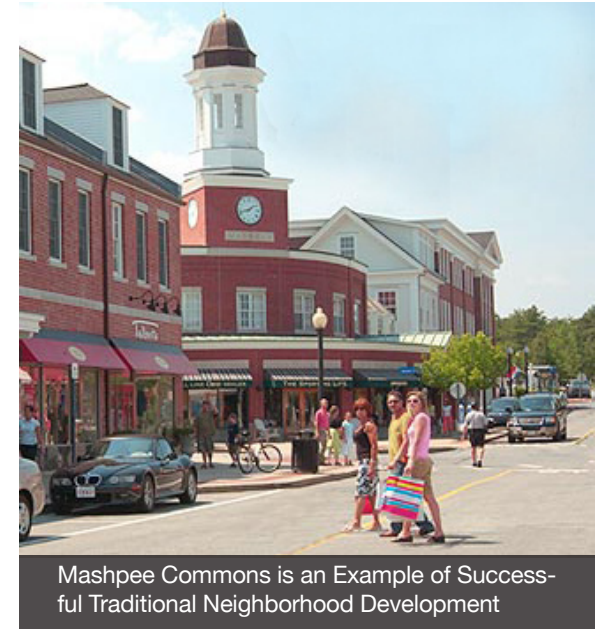
In response, there is a movement advocating the village concept, also known as traditional neighborhood development (TND) or New Urbanism. The elements of the Village Concept are:

- Diverse, mixed-use districts combining residential, commercial and civic uses in a compact area;
- A balance of public and private spaces that enhance identity and value;
- Use of traditional New England towns as a model for the future;
- Greater use of public transportation.

Needham Center's two commuter rail stations afford it the opportunity for transit-oriented development (TOD) which complements the above stated goals of the village concept while further promoting transportation choices and reducing automobile usage.

Density, Height & Street Edge

Intrinsic to the principles of a thriving town center is the desire to provide a diverse mix of uses in a walkable area with a vibrant streetscape. This requires an increased level of development to give the village center a built form that is walkable and well defined, as well as economically viable.



Mashpee Commons is an Example of Successful Traditional Neighborhood Development

Increased development means higher buildings that contribute to the streetscape and afford increased economic opportunity. It is also important to encourage building to the street edge to create a framework for village spaces.

Development Potential

The Development Plan encourages development of the following uses:

- **Retail** - A diverse range of retail style stores with “main street” being more appropriate than “big box”-style stores.
- **Office** - There is a demand for a variety of office uses with a particular niche for medically related office space driven by the hospital.

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- **Residential** - It is important to expand downtown housing choices to achieve a more vibrant town center.
- **Mixed-Use** - Diversity and character with a mix of uses are critical to a successful town center.
- **Parking Consolidation & Improvements** - There is the opportunity to consolidate and/or provide better management of existing parking.
- **Streetscape Improvements** - Public and private improvements to the streetscape will enhance the walkability of Needham Center.

Development Potential by District

Highlights of the development potential of the three zoning districts are broken out below:

Needham Center Business District

The proposed increased density is designed to enhance the town common as an urban space but not overpower the town hall. An east-west pedestrian link is delineated from Greene's Field to Center Station, which provides opportunities for mixed-use, transit-oriented development.

There is the opportunity for a public/private partnership for parking improvements in the Walgreens parking lot that is modeled on the successful consolidation of the Chestnut Street parking lot.

Chestnut Street Business District

The opportunities for the two distinct areas of this zoning district are discussed separately:

Lower Chestnut Street

This area is significantly impacted by the hospital, which is located primarily in the adjacent Medical Overlay District. The expansion of the hospital is expected to stimulate additional development along Chestnut Street. The Development Plan encourages projects that contribute to a well defined street edge along Chestnut Street.

Garden Street

The density proposed for this area is less than on Lower Chestnut Street because it is adjacent to a residential district to the west. In addition, multi-family and mixed-use multifamily projects are encouraged in this location to complement the adjacent residential neighborhood.

Highland Avenue Business District

The focus of this district is the development of Highland Avenue as a boulevard leading into downtown. The Development Plan proposes to enhance Highland Avenue in concert with the current improvements underway at Memorial Field.

Build-out and Traffic Analysis

A build-out analysis was performed to determine the likely amount of development to occur under the proposed zoning. Over the next twenty years redevelopment is likely to result in total build-out from the existing 1,230,000 SF to 1,448,000 SF.

In addition to zoning requirements, market



Proposed Street Frontage Development

absorption and traffic capacity will also affect the maximum build-out. The Development Plan proposes to improve traffic flow with the upgrade of five traffic signals and the addition of one new signal. A traffic analysis of the projected build-out shows that with the proposed signal improvements, wait times at five locations will be shorter than under existing conditions, and at the sixth location will be equal to existing conditions.

Beyond improvements to traffic flow in the downtown area itself, the town has designated a network of surrounding roads as throughways with the potential of diverting some through traffic from the center to these secondary street routes. The Development Plan also proposes that the town initiate traffic demand management (TDM)

initiatives that would result in more efficient use of transportation resources.

By utilizing the upgraded traffic signal system the town will also have the ability to monitor conditions at critical traffic congestion locations. This monitoring should be part of an annual review that includes evaluation of the secondary street routes and the TDM program.

Parking

The Development Plan includes a multi-pronged, comprehensive and balanced approach to accommodating parking for both existing uses and new development. Successful vibrant town centers require convenient parking provided in a way that complements the desired form of a mixed-use, walkable town center. The components of this comprehensive strategy include:

- Consolidation of off-street parking to provide more parking in less area.
- Modest reductions in parking requirements where appropriate.
- Additional flexibility in parking requirements to allow payment in lieu of parking requirements and encourage creative, shared parking solutions that is appropriate for mixed-use.
- Establishment of a parking fund to be used for parking and transportation-related improvements.
- Development of a parking management program to make better use of existing parking.

- Establishment of a transportation demand management program to reduce car trips into the center thereby reducing the demand for parking.
- Development of a parking structure.

Design Guidelines

The Design Guidelines have been developed to encourage good design that will contribute to a safe, attractive and vibrant town center. The guidelines are intended to provide direction to businesses, property owners, developers and town departments involved in development and improvement projects within the Study Area.

The Guidelines also serve as a reference for the Planning Board and other town departments involved in the project review process.

The guidelines provide a clear and consistent standard so that project applicants will understand the town's design goals and thus facilitate a smoother, more efficient review process.

These guidelines build upon the 1995 Design Guidelines for the Business Districts and are the result of a working partnership between the town, the business community and residents. The guidelines have been developed through an open and inclusive process of public discussion, workshops and review that has benefitted from the participation of a broad range of individuals and groups within the town.



Example of Successful Streetscape Illustrating Sidewalk Design Standards

Zoning Plan

The goals for the proposed zoning are designed to:

- Reduce barriers to development in the existing zoning.
- Encourage investment in new development and redevelopment of downtown properties.
- Protect the public interest in Needham Center as a vital, attractive business district.
- Provide for a fair, predictable development review and permitting system.
- Encourage a mix of uses including retail, services and housing.

The proposed zoning focuses primarily on the creation of four new overlay districts:

- Center District A
- Center District B
- Garden Street District
- Lower Chestnut Street District

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The benefits of this overlay zoning are as follows:

- Preservation of existing property rights.
- Creation of more choices.
- Provision of new development privileges under a different set of rules.
- Greater flexibility for both applicants and town boards reviewing proposed projects.
- Overlay districts ability to deviate from existing zoning district boundaries.

Highlights of the proposed overlay district zoning are discussed below, by district:

Needham Center

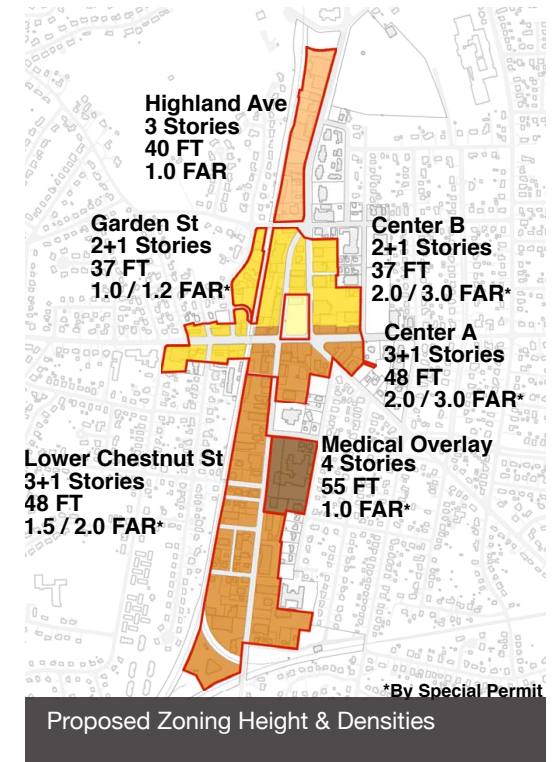
- Adds use regulations for five housing units by right, more units by special permit.
- Divides the Center Business District into two sub-districts in order to accommodate a maximum 4-story height along a portion of Great Plain Avenue (Center District A) and a maximum 3-story height in the rest of the Center Business District (B).
- Provides for significant increase in maximum FAR from 1.0 (existing) to 2.0 or 3.0 by special permit.
- Preserves existing side and rear setback rules for lots adjacent to residential districts.
- Lots adjacent to residential districts may have a setback of 10 FT for underground parking structures.
- Requires affordable housing units in mixed-use buildings with six or more housing units.

Chestnut Street

- Applies only to the Chestnut Street portion of the underlying Chestnut Street Business District.
- Allows taller buildings, but only on lots with frontage on Chestnut Street.
- Increases minimum lot size from 10,000 SF (existing) to 15,000 SF to encourage parcel assembly.
- Increases minimum frontage from 80 FT to 100 FT to reduce the number of curb cuts.
- Stipulates minimum and maximum front setbacks.
- Preserves existing side and rear setback rules for lots adjacent to residential districts except for:
 - Lots adjacent to residential districts may have a setback of 10 FT for underground parking structures.
 - Lots adjacent to MBTA Right of Way have a 25 FT setback composed of 10 FT landscape buffer (or landscaped surface parking by special permit) and 15 FT for accessory uses excluding structures (10 FT setback for underground parking also allowed).
- Increases maximum FAR from 0.70 (existing) to 1.5 or 2.0 by special permit.

Garden Street

- Applies only to the Garden Street portion of the underlying Chestnut Street Business District. Not as use-intensive as the Chestnut Street Overlay District.



- Retail use only by special permit.
- Multi-family dwellings by special permit.
- Minimum lot size in the overlay district is increased from 10,000 SF (existing) to 15,000 SF to encourage parcel assembly.
- Increases maximum FAR from 0.70 (existing) to 1.0 (multi-family/1.2 (all other allowed uses) by special permit.

Highland Avenue Business District

- No overlay district created here.

- Highland Avenue Business District replaces the existing Business District.
- Proposed regulations are primarily a “clean-up” of existing dimensional rules in order to achieve consistency with Needham’s other business districts.
- FAR of 1.0 added.

Implementation

The strategy to make a revitalized Needham Center a reality will require a multi-pronged approach that is persistent in effort, focused on goals and flexible in responding to changing community needs.

It is imperative that town officials keep the vision of a successful and vibrant village environment in the main stream of community awareness. The momentum of the study and the action that follows should be as seamless as possible. A follow-up “Action Committee” or some other mechanism to maintain momentum in this implementation process is essential. Otherwise it is all planning and no action. This will be a journey with celebrations for success and adjustments to setbacks. Commitment and persistence must invigorate the process. Like all things in life, you are growing or you are dying. This implementation requires the same nurturing in order to grow.

The implementation schedule below is divided into early action, a mid-term phase and a long-term phase. This implementation schedule is a

compilation of recommendations from the study and available information on potential private sector projects.

This implementation schedule includes general planning activities that serve to coordinate the various projects. Project opportunities are organized by public projects, public/private partnerships and private development. The implementation schedule is front loaded in the early action phase with planning and projects to kick start redevelopment efforts. Work initiated in the early action phase will be continued in the successive phases as discussed below.

Early Action 2008 - 2009

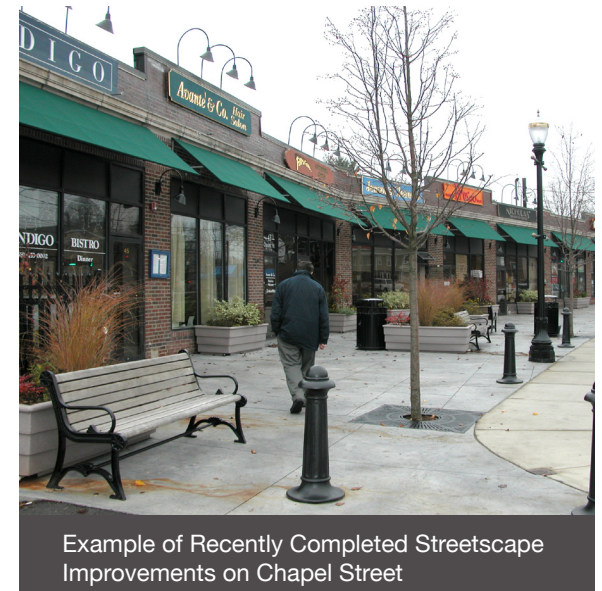
The early action phase includes both activities already underway and those targeted for catalyzing town center redevelopment.

Planning

- Zoning Vote - Spring Town Meeting 2009
- Economic Development Specialist hired in 2007
- Needham Center Action Committee formed
- The Community Preservation Act has already been adopted and will be used as one source of funds for qualifying Needham Center projects

Public Projects

- Town Hall and Town Common
- Senior Center
- Memorial Field



Example of Recently Completed Streetscape Improvements on Chapel Street

- Road & Sidewalk Improvements
 - Traffic Signal Upgrades - Phase 1
 - Chestnut Street Reconstruction
 - Road and Sidewalk Improvements - Phase 1

Public / Private Partnerships

- Streetscape Improvements
- Parking Consolidation Projects

Private Projects

- Hospital Expansion, Phase 1
- Theater Block Mixed-Use Project - Phase 1
- Roche Brothers Site Improvements
- Walgreens Site Improvements

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Mid-Term 2010 - 2014

The mid-term phase will build on planning initiatives and projects started during the early action phase.

Planning

- Needham Center Action Committee Five Year Review, Evaluation and Course Corrections

Public Projects

- Road and Sidewalk Improvements
 - Traffic Signal Upgrades - Phase 2
 - Road and Sidewalk Improvements - Phase 2
- Needham Junction Station Parking
- Emery Grover

Public / Private Partnerships

- Streetscape Improvements
- Parking Consolidation Projects

Private Projects

- Hospital Expansion, Phase 2
- Theater Block Mixed-Use Project - Phase 2

Long-Term 2015 - 2028

The Long-Term phase anticipates completion of projects initiated in the previous two phases plus the advent of new opportunities for public and private projects. The success of previous phases towards a new, vibrant village environment will stimulate further development in the latter action phase.

Planning

- Needham Center Action Committee 10 & 15 Year Review, Evaluation and Course Corrections

Public Projects

- Needham Center Redevelopment
- Road and Sidewalk Improvements - Phase 3

Public / Private Partnerships

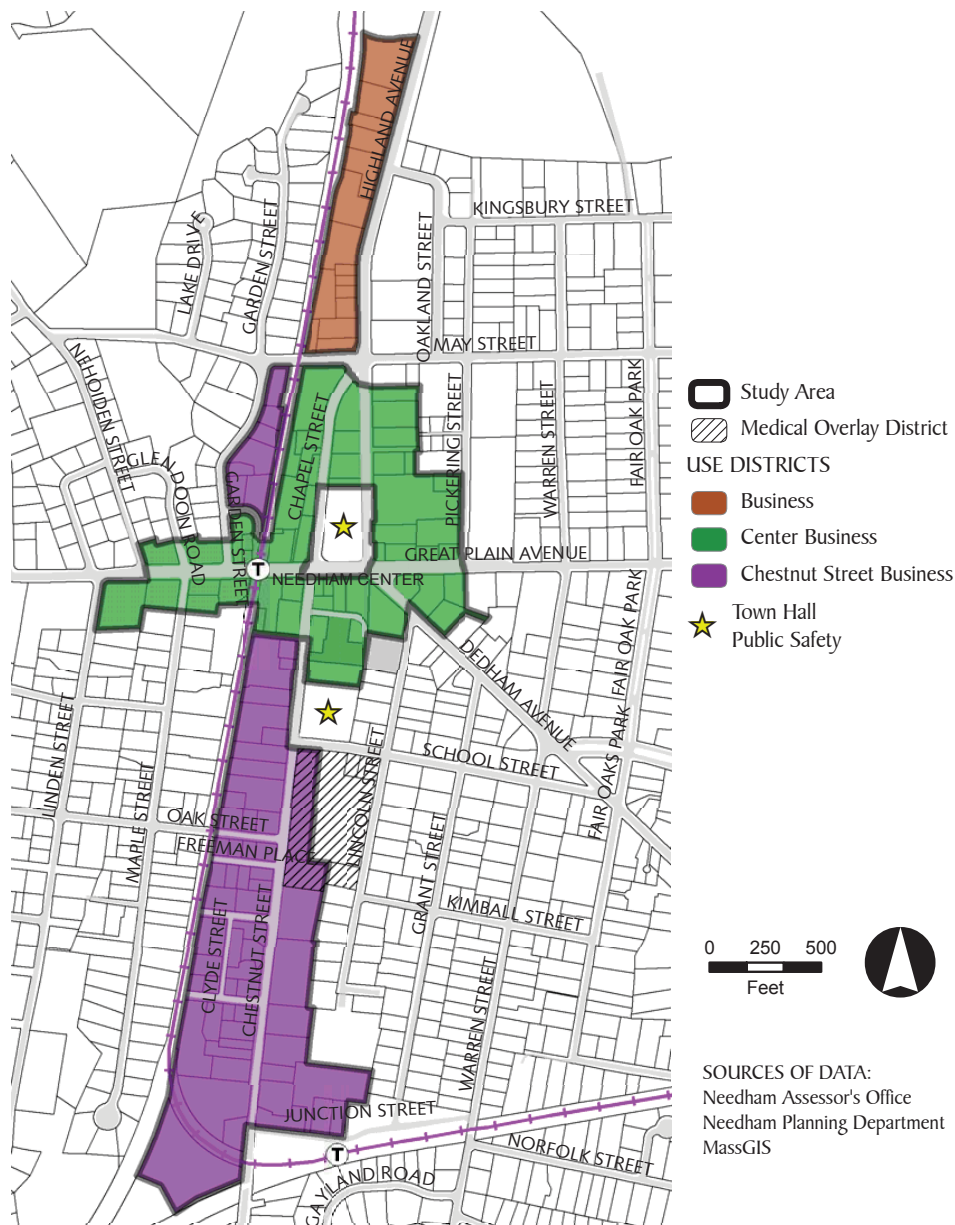
- Parking Structure

Private Projects

- Hospital Private Parking Lot Redevelopment
- Lower Chestnut Street - MBTA Properties Redevelopment



Proposed Mixed-Use Development Along Chestnut Street



The scope of this study is comprised of the three downtown zoning districts as identified in the map to the right. Summary data by district is listed below.

- (Highland Avenue) Business
 - 7.1 acres (parcels only)
 - 15 parcels
 - 118,829 GSF building area
- Center Business
 - 21.1 acres (parcels only)
 - 52 parcels
 - 554,710 GSF building area
- Chestnut Street Business
 - 26.3 acres (parcels only)
 - 64 parcels
 - 556,147 GSF building area

The Study Area in total includes:

- 54.4 acres (parcels only)
- 131 parcels
- 1,229,686 GSF building area

The Study Area is organized along the north-south traffic arterial of Highland Avenue/Chapel Street/Chestnut Street. This north-south arterial intersects with the east-west arterial, Great Plain Avenue, in the Needham Center Business District, which is the hub of downtown, marked by Town Common and adjacent Town Hall.

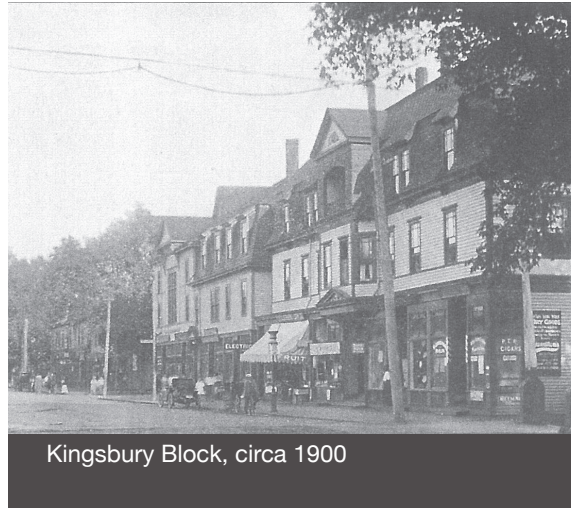


Historical Rendering of Needham circa late 1890s

Excavated artifacts show the existence of Native American settlements in what is now Needham dating back 8,000 years. The European settlement of Needham began in the 1640s. Early settlers made their living as farmers. In 1711, with a population of 250, the Town of Needham was incorporated.

The 1850s immigration of English knitters began what would develop into large knitting factories that would produce world-famous goods. Farming continued to be an important component of the local economy. In the late 1800s the main agricultural goods produced in Needham were poultry, flowers and dairy products.

In 1853, the first rail line was laid, connecting Needham to Boston. The rail line was denied access to the original town center at Central Avenue and



Kingsbury Block, circa 1900

Nehoiden Street and was diverted southeastward toward Great Plain Village (currently Needham Center). The presence of the railroad attracted businesses and workshops. A rising professional class took advantage of the convenience of train travel to Boston and began building townhouses along the roads that surrounded the station. By the late 1870s, Great Plain Village became the de facto center of Needham.

In 1884, the Town purchased a large square of land for the Common, bounded by Highland and Great Plain Avenues and Chapel Street. For the next two decades municipal offices were located above Woodruff's General Store on Great Plain Avenue. In 1901, Town Meeting recognized the need for "proper and fitting accommodations" for the conduct of town business. Town Hall was



Town Hall, 1907

built in 1902 and became a symbol of the town's prosperity and "progressive spirit". Today, Town Hall remains the most enduring and recognizable image of Needham.

Gradually both dairy farming and the knitting industry declined. Post World War II developments brought Route 128, the nation's first circumferential highway around a major city. In the 1950s locations along Route 128 were developed into industrial parks. In the 1980s and 1990s, these industrial parks became the locations for high tech firms.

Today, Needham is one of the more desirable suburbs of Boston with easy access to the city, a good school system and a strong sense of community.

The following studies have been reviewed for relevance:

- Planning Studies, 1983
- Land Use, Zoning & Traffic Study, 1988
- MIT Planning Studies, Needham Center, 2003
- Needham Community Development Plan, 2004

See the Inventory of Related Studies in the Appendix.

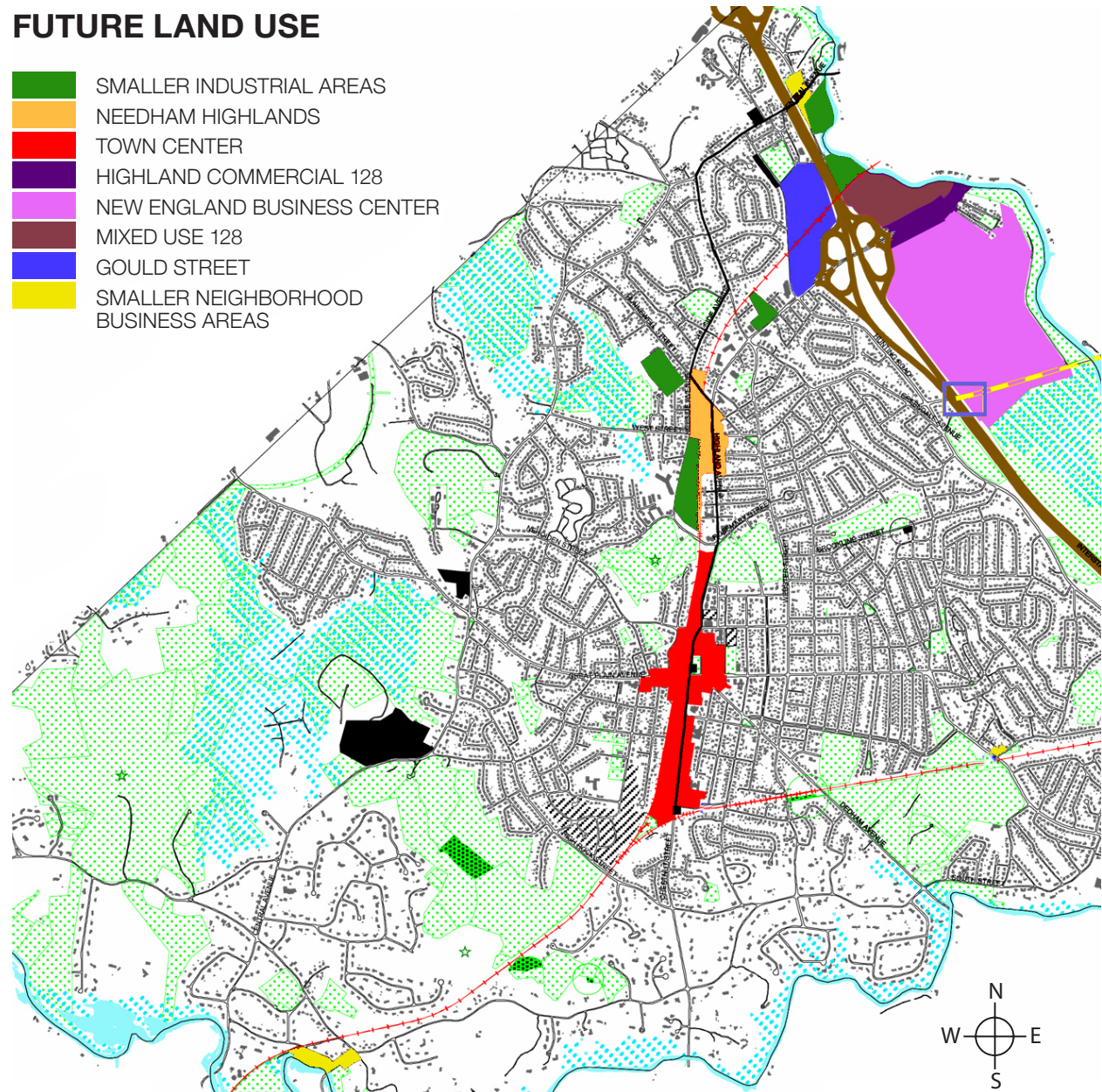
Needham's interests in economic development are consistent through the course of these studies as evidenced by sections on:

- Fiscal benefits gained through increased tax base
- Job opportunities for local residents
- Convenient provision of goods and services
- Enhancement of appearance/character of the community
- Avoidance or mitigation of negative impacts

On the other hand, a goal that has evolved more recently is the creation of more housing downtown (as recommended in the MIT Planning Studies and Community Development Plan). This is in contrast to earlier studies in the 1980s. Housing in Needham Center was rejected in the 1983 study and was not addressed in the 1988 study. The MIT studies emphasized Needham Center as a place for social exchange, improving the quality of life, affordable housing, and the enhancement of its physical form and sense of place. As noted above, housing was emphasized as a significant and essential component of a revitalized town center.

Finally, the Community Development Plan is a comprehensive plan for all of Needham. As shown in the map above, this study identified Needham Center as an area for mixed-use development, with the potential for housing as a core goal in the Town's strategic planning for the Center.

FUTURE LAND USE



Land Use Patterns

In many ways, Needham Center is the kind of downtown that other communities yearn for. It has shops, services, a post office, public transportation, a hospital, and charitable and religious uses. Needham Town Hall occupies a prominent spot at the corner of Great Plain Avenue and Highland Avenue, overlooking a well-kept town common. Many of the buildings are locally owned, attractive, and interesting from a pedestrian's point of view. Needham Center also has buildings that need improvements, yet even they are relatively valuable.

Retail uses account for nearly 50 percent of the development that exists in Needham Center today. Data from the local assessor indicate that retail and restaurant uses occupy approximately 573,000 SF of the total floor area in the three zoning districts. Banks, office space and medical offices occupy another 287,000 SF, while mixed commercial and residential uses and free-standing residential uses occupy about 86,000 SF. The remaining floor area is devoted to other types of commercial uses, and public, religious or charitable uses, the most noteworthy being Beth Israel Deaconess Hospital-Needham on Chestnut Street. Table 2 reports the approximate amount of development in each major use class for each zoning district in the Study Area.

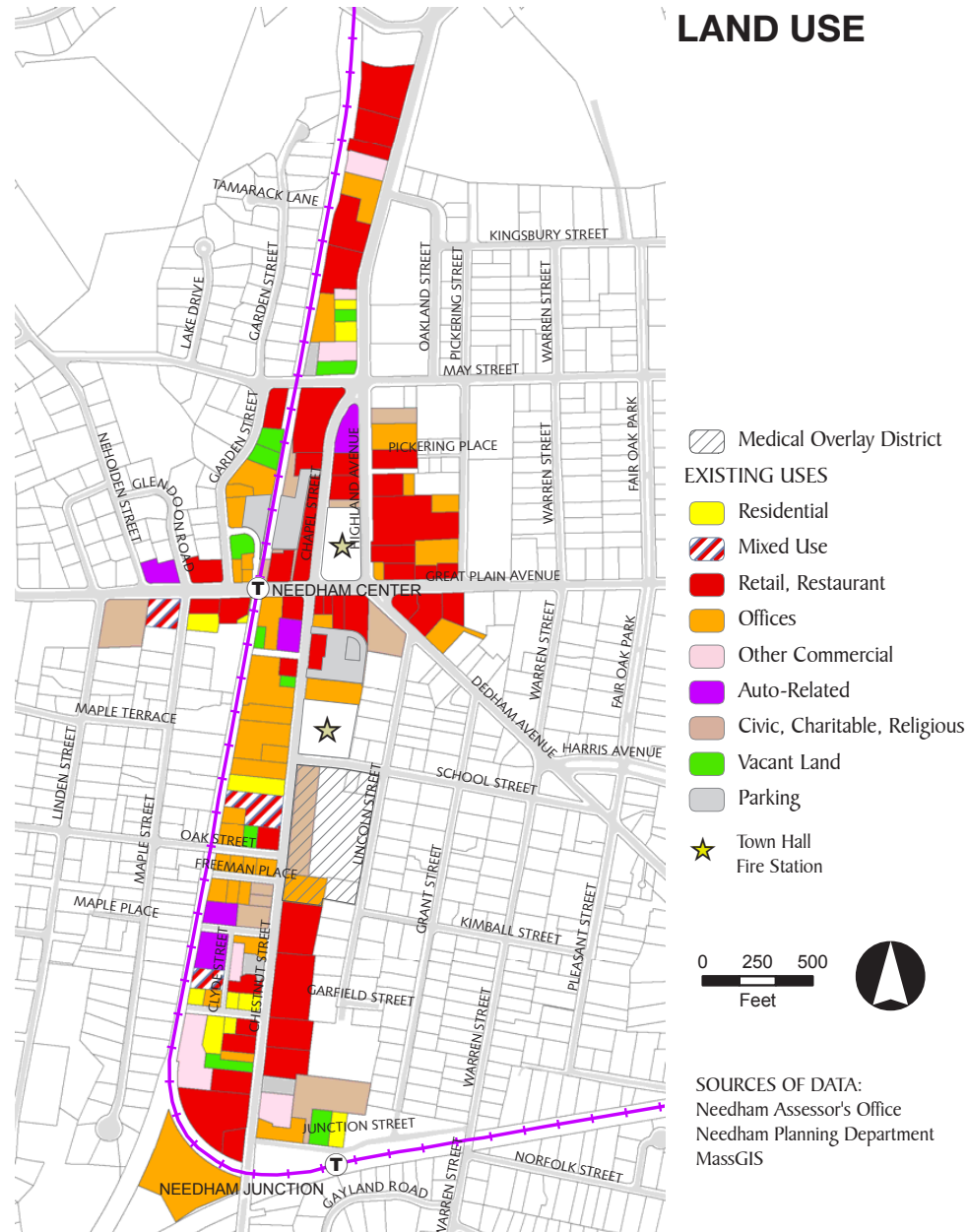


Table 2

EXISTING LAND USES BY GROSS FLOOR AREA					
Floor Area by Zoning District					
Class of Use	Business	Center Business	Chestnut St	Total	Percent
Mixed Commercial-Residential	0	20,482	23,254	43,736	3.5%
Residential	4,477	0	37,844	42,322	3.4%
Retail, Restaurants	73,570	312,322	187,178	573,070	46.6%
Offices	19,575	119,399	144,479	283,453	23.1%
Other Commercial	19,387	0	26,601	45,988	3.7%
Auto-Related Uses	1,820	11,592	16,487	29,899	2.4%
Public Services	0	20,108	0	20,108	1.6%
Charitable, Religious	0	70,807	120,305	191,112	15.5%
TOTAL	118,829	554,710	556,147	1,229,687	100%

Source: Needham Assessor's Office, Planning Department, DiNisco Design Partnership, Community Opportunities Group

Table 3

FOR PROFIT AND NON PROFIT ESTABLISHMENTS			
Establishment	Number	Establishment	Number
Professional Services	100	Charitable, Other Non-Profit	13
Retail	96	Auto-Related	9
Personal Services	47	Construction, Industrial	8
Finance, Real Estate	20	Other	20
Business, Technical Services	15	Total	328

Source: Joyce Moss, Nicole Bourassa, Needham Planning Department, Community Opportunities Group

Mix of Businesses

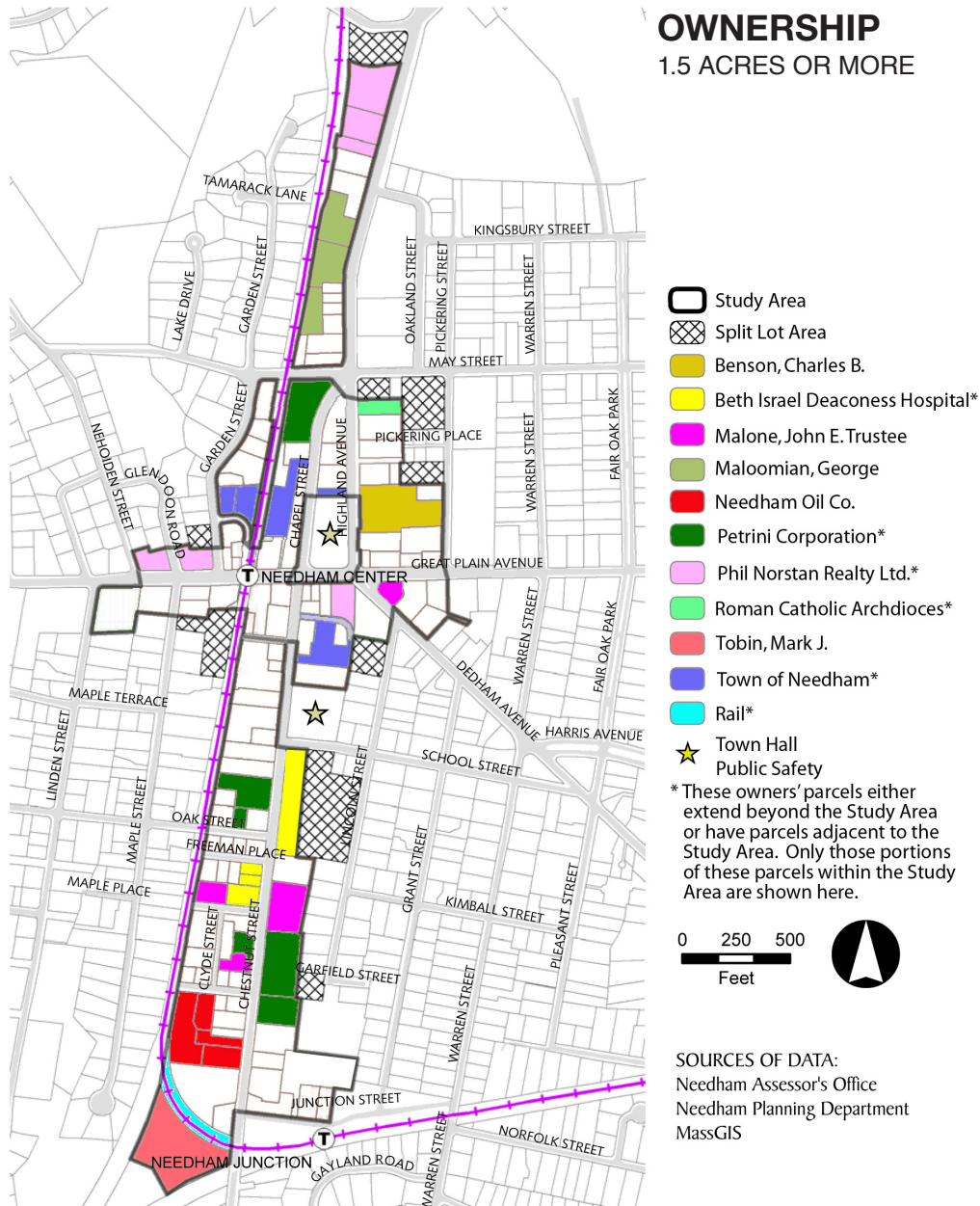
The amount of floor area allocated to various classes of land use does not always provide a clear picture of the number or types of businesses found in a commercial district, and this can be seen in Needham Center. A field survey conducted by the Needham Planning Department (April 2007) indicates that about 320 establishments operate within or immediately adjacent to the Study Area, excluding government agencies of the Town of Needham or the U.S. Postal Service. Retail constitutes 29 percent of the total, and professional and business services, 30 percent. The Study Area has a conspicuously large percentage of personal service establishments, 14 percent. Table 3 reports the number of establishments by industrial classification in Needham Center, based on data provided by the Planning Department.

Economic Characteristics

The Study Area includes or is intersected by taxable and tax-exempt properties, as one would expect in a central business district. Of the 17 tax-exempt parcels, five have been excluded from the area calculations used to estimate Needham Center's future development potential. Four parcels owned by the Town of Needham include Town Hall, the fire station, Town Common, and off-street parking. The fifth parcel is the MBTA right-of-way at various locations.

Tax-exempt properties included in the Study Area analysis include the Beth Israel-Deaconess Hospital facility and associated parcels on Chestnut Street, three Town-owned parcels, a parcel owned by the MBTA, the Post Office, and two parcels occupied by religious or educational uses. In FY07, the total assessed value of commercial and industrial property in the Study Area was \$102M, or 14 percent of the assessed value of all commercial and industrial properties for the Town as a whole (real property only).





Parcel Size

The Ownership Plan to the left identifies the 11 owners controlling 1.5 acres or more in or adjacent to the Study Area. This includes the commuter rail line running through the Study Area. In addition to the rail line and individuals, the owners include Beth Israel Deaconess Hospital-Needham, Needham Oil Co, the Roman Catholic Archdiocese of Boston and the Town of Needham.

Besides the rail, the largest landowners in the Study Area are Beth Israel Deaconess Hospital-Needham, Petrini Corporation, Phil Norstan Realty and the Town of Needham, all controlling approximately four acres each.

As can be seen in the Ownership Plan, the larger land holdings controlled by one party are interspersed throughout the Study Area amongst the typical, smaller parcels.

There are relatively few large parcels. Without the consolidation of smaller parcels there are relatively few opportunities for projects over 30,000 SF under existing zoning as is discussed below.

Use Regulations

The Study Area's three commercial zoning districts have similar use regulations, but there also are noteworthy differences. Viewed in their entirety, the use regulations anticipate intensive retail activity in the core of downtown and a somewhat broader range of commercial uses along corridors leading into the downtown area. For example, the Zoning Bylaw provides for retail development throughout Needham Center, but the Business and Chestnut Street Business Districts have been designated for larger retail establishments while the Center Business District's regulations favor small stores and shops, presumably in multi-tenant buildings. Offices also are allowed throughout, but only in upper-story space in the Center Business District in order to preserve the street for retail.

All of the districts allow some residential uses, but not the same types of residential uses or the same amount of residential space within a building. Single-family and two-family homes are permitted in the Business District and prohibited in the Center Business and Chestnut Street Business Districts. In contrast, multifamily units are allowed by Special Permit in the Center Business and Chestnut Street Districts, and prohibited in the Business District. Not surprisingly, the use regulations in these districts discourage or prohibit auto-related uses such as gas stations and auto repair shops, and uses unlikely to generate much foot traffic for retailers. A remarkable feature of Needham Center's zoning

ZONING DISTRICTS



Table 4

SUMMARY OF DENSITY AND DIMENSIONAL REGULATIONS			
Dimensional Standard	Business	Center Business	Chestnut Street Business
Minimum Lot Area (SF)	10,000	10,000	10,000
Minimum Frontage (Feet)	80	80	80
SETBACKS			
Front ¹	10/20	3	20
Side/Rear ²	50	50	50
BUILDING HEIGHT ³			
Stories	3.0	2.5	2.5
Feet	40	35	35
Maximum Floor Area Ratio	N/A	1.00	0.70
LOT COVERAGE ⁴			
Corner Lots	35-50%	N/A	N/A
Interior Lots	25-40%	N/A	N/A

Source: Needham Zoning Bylaw, Section 4.4

NOTES

¹ The setback of 10 feet applies to Business District lots created prior to 1952, and 20 feet to lots created thereafter.

² Side/rear setbacks apply on lots adjacent to a residential district. For the Business District, the side and rear setback to residential districts applies to areas rezoned to Business after 1952. In the Center Business and Chestnut Street Business Districts, at least 25 feet within the 50-foot setback must be landscaped in accordance with Section 4.4.8.5 of the Zoning Bylaw. An exception to the 50-foot rule applies in the Chestnut Street Business District for lots abutting the MBTA right-of-way.

³ Height is further regulated by limiting the number of stories that may be occupied for nonresidential purposes.

⁴ Coverage requirements may be increased in exchange for underground parking or parking located within a building, at a rate of 2.5 percentage points above the maximum coverage ratio for each one square foot of parking space.

regulations is that all food service establishments, regardless of size or type, require a Special Permit from the Planning Board. A limited repertoire of industrial uses is allowed by Special Permit in the Business District. In general, the Business District's use regulations are somewhat archaic and less appropriate for a downtown gateway than the regulations that govern activity in the Chestnut Street Business District. See the Land Use and Zoning Report in the Appendix for a complete summary of the use regulations for each district in the Study Area.

Density & Dimensional Regulations

A basic set of lot dimensional regulations applies consistently throughout the Study Area: a minimum lot size of 10,000 SF and minimum frontage of 80 feet. However, the maximum allowable use intensity varies by district. To some extent, the differences relate to the type of business environment that is fostered by the use regulations – a compact retail core along Great Plain Avenue with less intensive, mixed commercial uses within the gateways.

In the Center Business and Chestnut Street Business Districts, intensity of use is controlled by a maximum gross floor area ratio (FAR) of 1.00 and 0.70 respectively. The Business District involves a more complicated approach, however. In lieu of FAR standards, the Business District establishes a sliding scale of lot coverage and building height for three use groupings, by lot location. The regulations

were designed to promote three outcomes: to encourage more prominent buildings at street corners, to encourage taller buildings in general, and to control bulk by correlating the maximum allowable building footprint with building height. Although the Business District does not have explicit FAR requirements, the lot coverage and height regulations effectively simulate a maximum FAR of 0.40 to 0.75 for interior lots and 0.50 to 1.05 for corner lots.

The districts also have somewhat different rules for building height, and these differences are important. Buildings of three stories and 40 feet are permitted in the Business District, and no building may have more than three occupied stories. In contrast, the Center Business District regulations limit buildings to 2 ½ stories and 35 feet. Nonresidential uses may occupy a maximum of two stories, or alternatively, residential uses may occupy the second story and the half story above it. Building heights of 2 ½ stories and 35 feet are also permitted in the Chestnut Street Business District, with occupancy (other than storage) limited to two stories. Table 4 summarizes the basic density and dimensional requirements that apply in each district.

Off-Street Parking Requirements

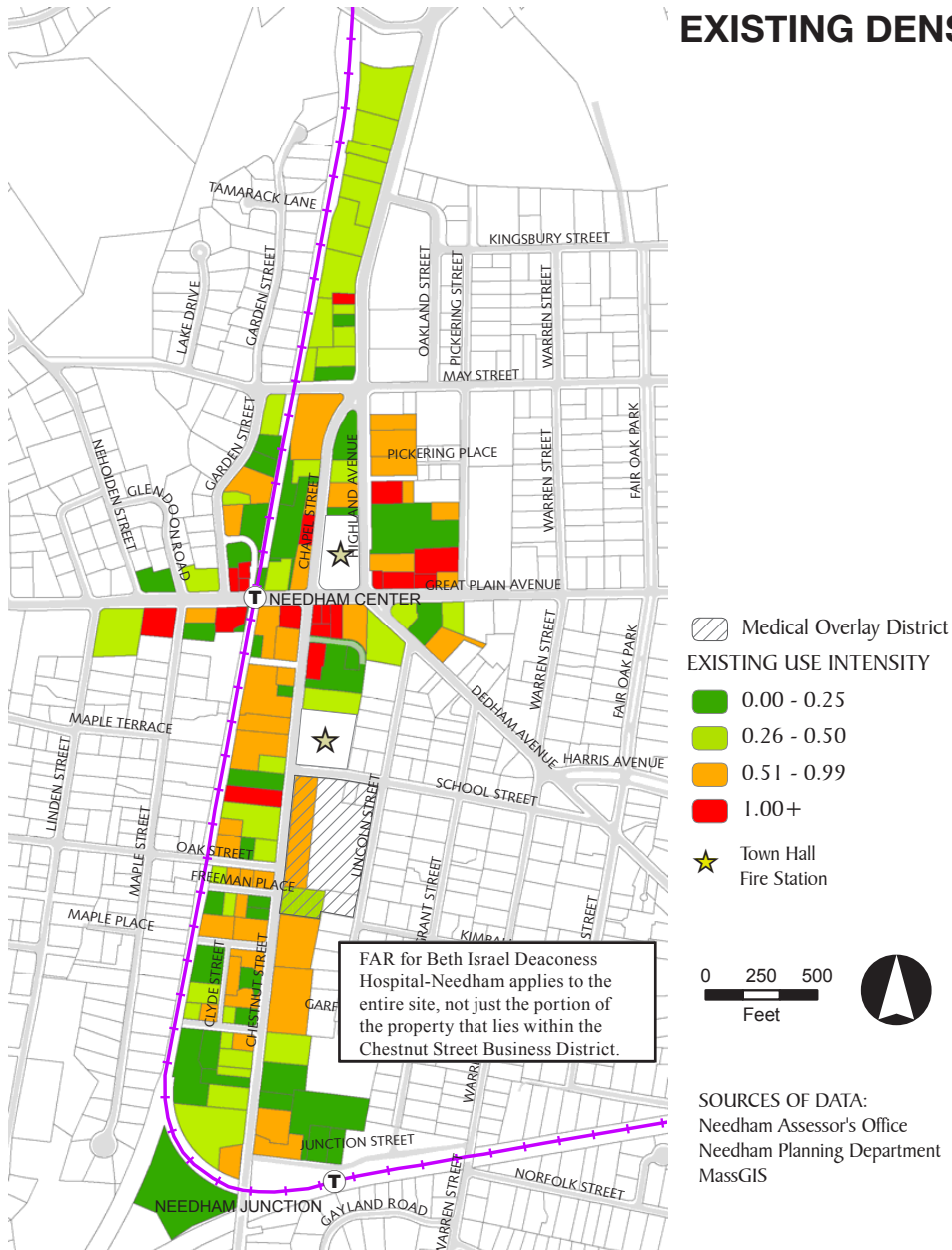
In addition to density and dimensional controls, off-street parking regulations affect the amount of development that can occur on a lot. In Needham,

parking areas with more than five parking spaces have to comply with design, landscaping, lighting and setback standards, and parking areas with more than 40 spaces must accommodate bicycles (one bicycle rack per 20 vehicular parking spaces). Most nonresidential uses are required to provide one space per 300 SF of gross floor area, but a higher standard applies to medical offices and other medical-related uses. The Zoning Bylaw does not provide explicit off-street parking standards for multi-family uses except for lots in an Apartment District. However, since the Apartment-1 density regulations apply to upper-story residential uses in the Center and Chestnut Street Business Districts, it is reasonable to assume that Apartment District parking requirements also apply (at least 1.5 spaces per unit). For mixed-use developments, Needham requires a separate off-street parking calculation for each use in a building, with the total required off-street parking equal to the sum of all uses.

In all zoning districts except the Center Business District, the Zoning Board of Appeals has authority to waive the required number of parking spaces by Special Permit. Parking waivers may be granted for unique conditions on a lot or circumstances that make it unnecessary for a particular project to provide the amount of parking that would normally be required under the Zoning Bylaw. Somewhat different standards apply in the Center Business District, where the Planning Board serves as Special Permit Granting Authority (SPGA).

According to the Planning Department, the Planning Board generally grants parking waivers for projects involving the redevelopment of existing structures with no net increase in total floor area.

EXISTING DENSITY

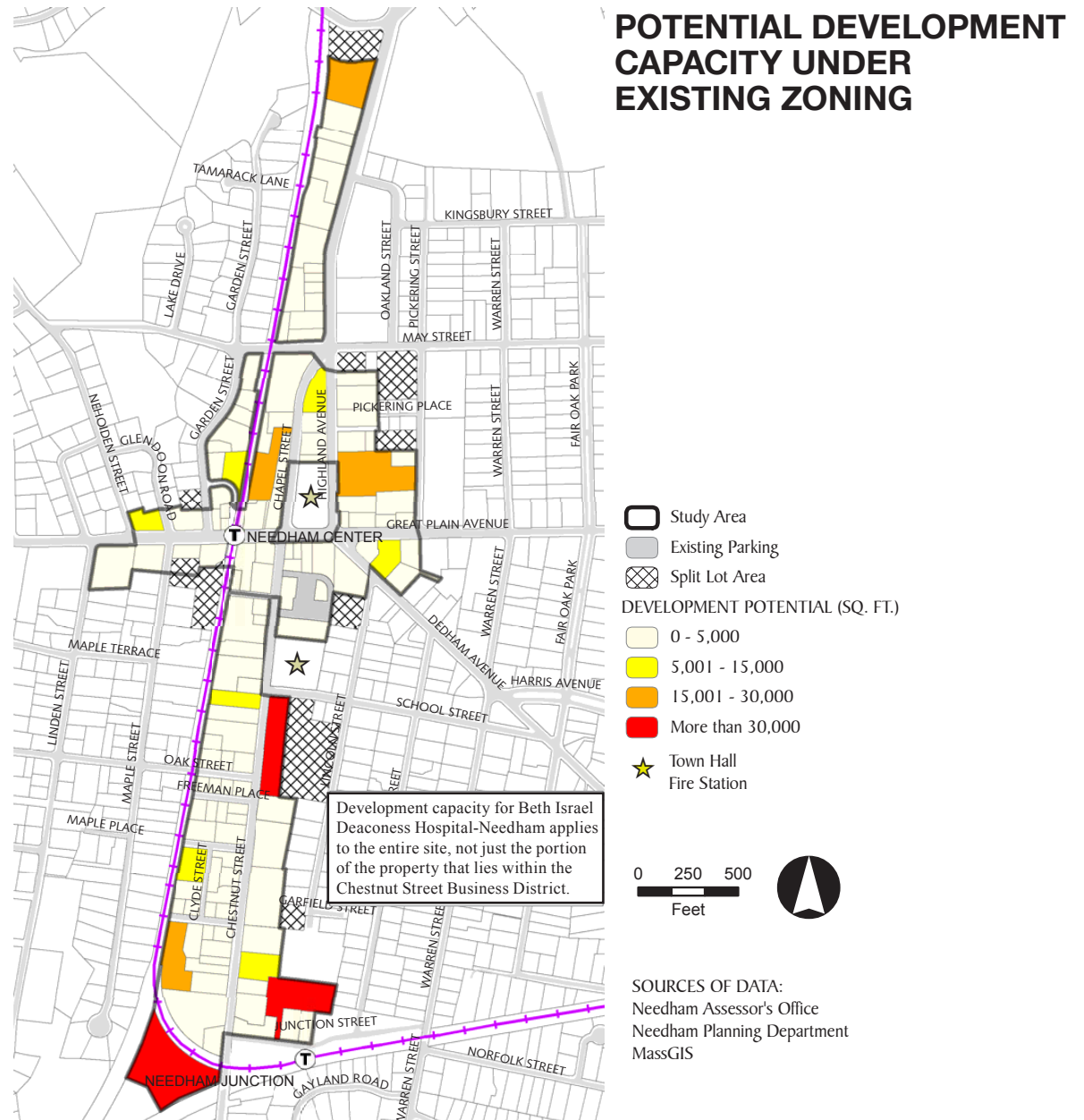


Methodology and Assumptions

The Town of Needham's Geographic Information System (GIS) data library and records from the assessor's office provided the foundation for analyzing the Study Area's property characteristics, degree of conformance with existing zoning, and the amount of additional development that could occur under existing zoning. See the Land Use, Zoning & Build-Out Analysis report in the Appendix for additional details regarding the collection of data for the Build-Out Analysis.

To establish an "effective" FAR, or the FAR that is actually attainable given the impact of off-street parking, the consultants created prototype development plans from three sample properties (Petrini, 392 Chestnut Street; Rinaldi, 1110 Great Plain Avenue; Mackin, "the Theatre Block", 916 Great Plain Avenue). The first parcel has surface parking only while the others incorporate underground parking. This analysis reveals that the projects with underground parking have an average FAR of 0.77 and the project with surface parking has an FAR of 0.31. Assuming that half the projects going forward under existing zoning would use underground parking and half would use surface parking, the resulting average FAR is 0.54. All parcels in the Study Area were then sorted by size: under 15,000 SF; between 15,000 SF and 30,000 SF; and greater than 30,000 SF. The consultants made an assumption that parcels

under 15,000 SF have no effective development capacity under current zoning. About half of the parcels in this sub-set do not comply with current frontage requirements. For parcels between 15,000 SF and 30,000 SF, the consultants applied the average effective FAR of 0.54 from the prototype plan with surface parking, and for parcels greater than 30,000 SF, the consultants applied a modified version of the average FAR for existing projects with underground parking. If 70 percent of potential projects on large parcels included underground parking and 30 percent utilized only surface parking, the larger parcels would attain an average effective FAR of 0.63. The average effective FAR for mid- and larger-size parcels provided a basis for estimating the maximum development potential under existing zoning for each parcel. Properties with existing building area greater than 50 percent of the maximum development potential building area were subsequently excluded on the assumption that they do not have enough incentive for redevelopment. The sum of the potential additional building area on the remaining parcels forms the basis for estimating the total development potential under Needham's existing zoning.



Findings

In the Business District on Highland Avenue:

- Five parcels lack sufficient frontage and lot area to comply with existing zoning, but all are in common ownership with adjacent parcels.
- The average floor area ratio (FAR) for existing properties is 0.46. Under an effective FAR analysis, however, most of the properties do not have enough additional development capacity to support the required investment. On average, properties in the Business District already support about 76 percent of their total development potential.
- One parcel has potential to support 28,637 SF of additional space.

In the Center Business District:

- Thirteen parcels lack sufficient frontage and lot area to comply with existing zoning, but most are in common ownership with adjacent parcels.
- The average floor area ratio (FAR) for existing properties is 0.84. However, the height regulations and off-street parking requirements under existing zoning mean that in effect, most of the properties do not have enough incentive to redevelop. On average, properties in the Center Business District already support about 88 percent of their total development potential.
- Six parcels have potential to support a combined total of 114,986 SF of additional space.

In the Chestnut Street Business District:

- Sixteen parcels lack sufficient frontage and lot area to comply with existing zoning, but most are in common ownership with adjacent parcels.
- The average floor area ratio (FAR) for existing properties is 0.42. However, the dimensional regulations and off-street parking requirements under existing zoning mean that in effect, most of the properties do not have enough additional development capacity to support the required investment. On average, properties in the Chestnut Street Business District already support about 78 percent of their total development potential.
- Seven parcels have potential to support a combined total of 129,502 SF of additional space.

Overall In the Primary Use Districts:

- Fourteen out of 131 parcels have the potential to support additional development under Needham's present zoning requirements. The combined development capacity of the 14 parcels is 273,124 SF, if redevelopment of the larger parcels includes underground parking to support the additional space.

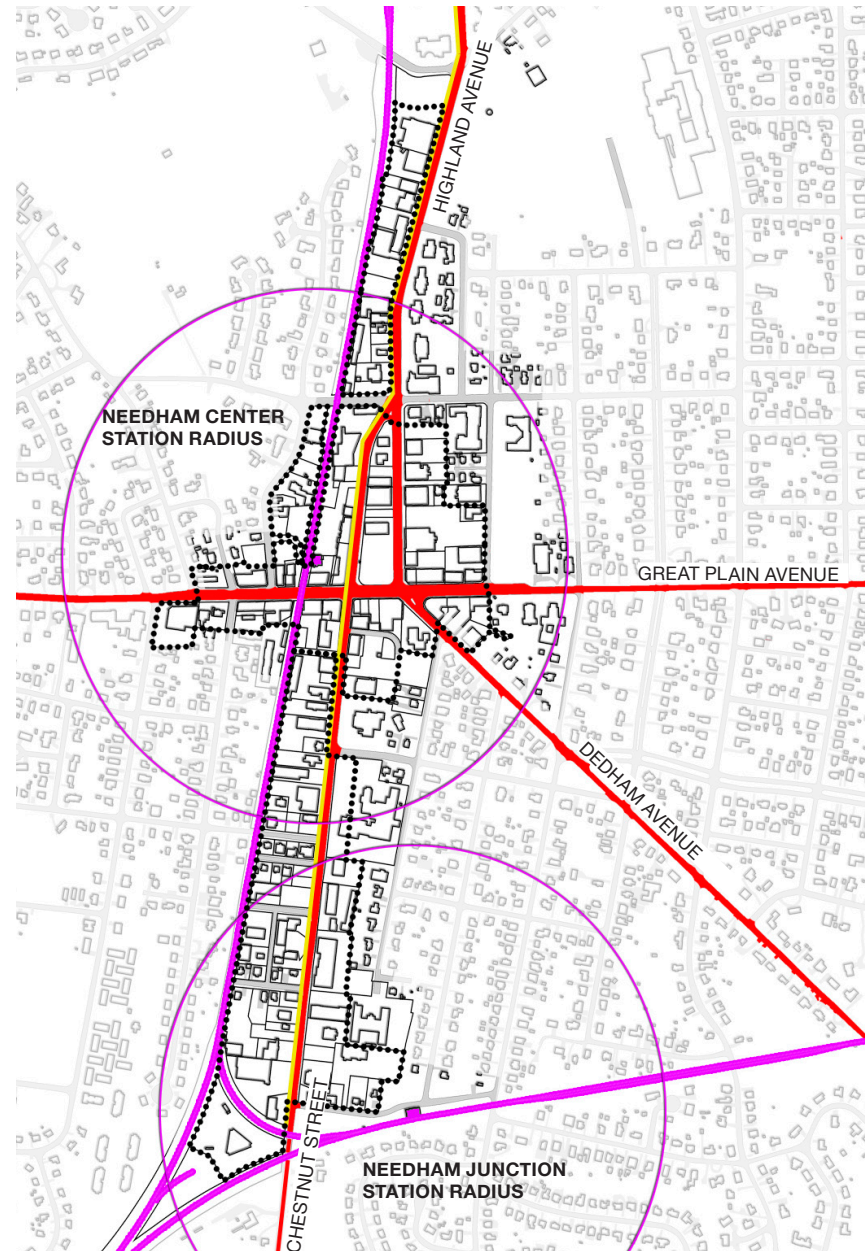
In the Medical Overlay District:

- Land in the district is developed at approximately 64 percent of its total capacity under current zoning.
- Since the Medical Overlay District excludes structured parking from FAR limitations, additional development is possible in this area despite

a relatively large percentage of development that already exists in the district.

- The effective FAR derived from the prototype development plans is not applicable to a single-user, non-profit charitable project such as a hospital. However, it is applicable to other uses permitted in the Medical Overlay District, such as a for-profit medical services building.

The traffic and parking study primarily focused on the downtown area bordered by the corridors of Great Plain Avenue (Route 135), Nehoiden Street, May Street, Pickering Street, Dedham Avenue (Route 135), School Street and Chestnut Street. The streets within this central business district are classified as urban arterials and are under the Town's jurisdiction. The speed limits are not posted within the center business district; however, the speed limit is posted as 25 mph on Dedham Avenue northbound, south of the site and as 35 mph on Great Plain Avenue westbound, west of the site.



TRANSPORTATION

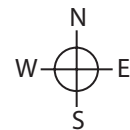
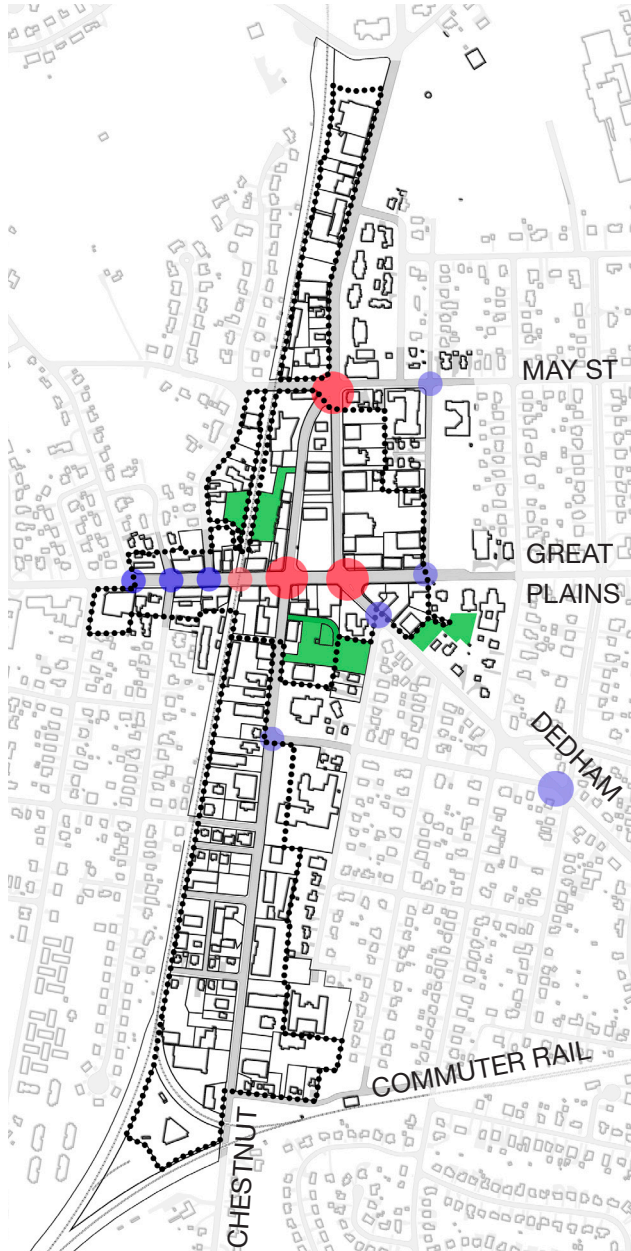
- ROADS
- COMMUTER RAIL
- #59 BUS ROUTE
- 1/4 MILE RADIUS
- LIMIT OF STUDY AREA



Source of Data: Town of Needham, MassGIS

INTERSECTIONS & PARKING LOTS

- UNSIGNALIZED INTERSECTIONS
- SIGNALIZED INTERSECTIONS
- TOWN-OWNED PARKING LOTS
- LIMIT OF STUDY AREA



Source of Data: Town of Needham, MassGIS

The following intersections are locations to be included as part of this study:

Unsignalized Locations

- Nehoiden St/Great Plain Ave
- Glendoon Rd/Maple St/Great Plain Ave
- Garden St/Great Plain Ave
- Pickering St/Great Plain Ave
- Pickering St/May St
- Lincoln St/Dedham Ave
- School St/Chestnut St
- School St/Dedham Ave

Signalized Intersections

- MBTA Commuter Rail/Great Plain Ave
- Chapel St/Chestnut St/Great Plain Ave
- Dedham Ave/Highland Ave/Great Plain Ave
- Highland Ave/Chapel St/May St

Table 5

EXISTING TRAFFIC OPERATIONS									
	2000			2007			Total % Change		
ATR Location	NB	SB	Total	NB	SB	Total	NB	SB	Total
Chestnut Street south of Great Plain Avenue	4,598	8,182	12,780	6,139	6,733	12,872	34%	-18%	0.72%
Dedham Avenue south of Lincoln Street	3,757	5,850	9,607	5,140	4,271	9,411	37%	-27%	-2%
Highland Avenue north of May Street	5,767	12,023	17,890	8,149	9,136	17,285	39%	-24%	-3%
ATR Location	EB	WB	Total	EB	WB	Total	EB	WB	Total
GPA near Nehoiden Street	12,140	6,456	18,596	10,984	8,262	19,246	-9.5%	28%	3.5%

LEGEND
NB: Northbound
SB: Southbound
EB: Eastbound
WB: Westbound

Traffic Volumes

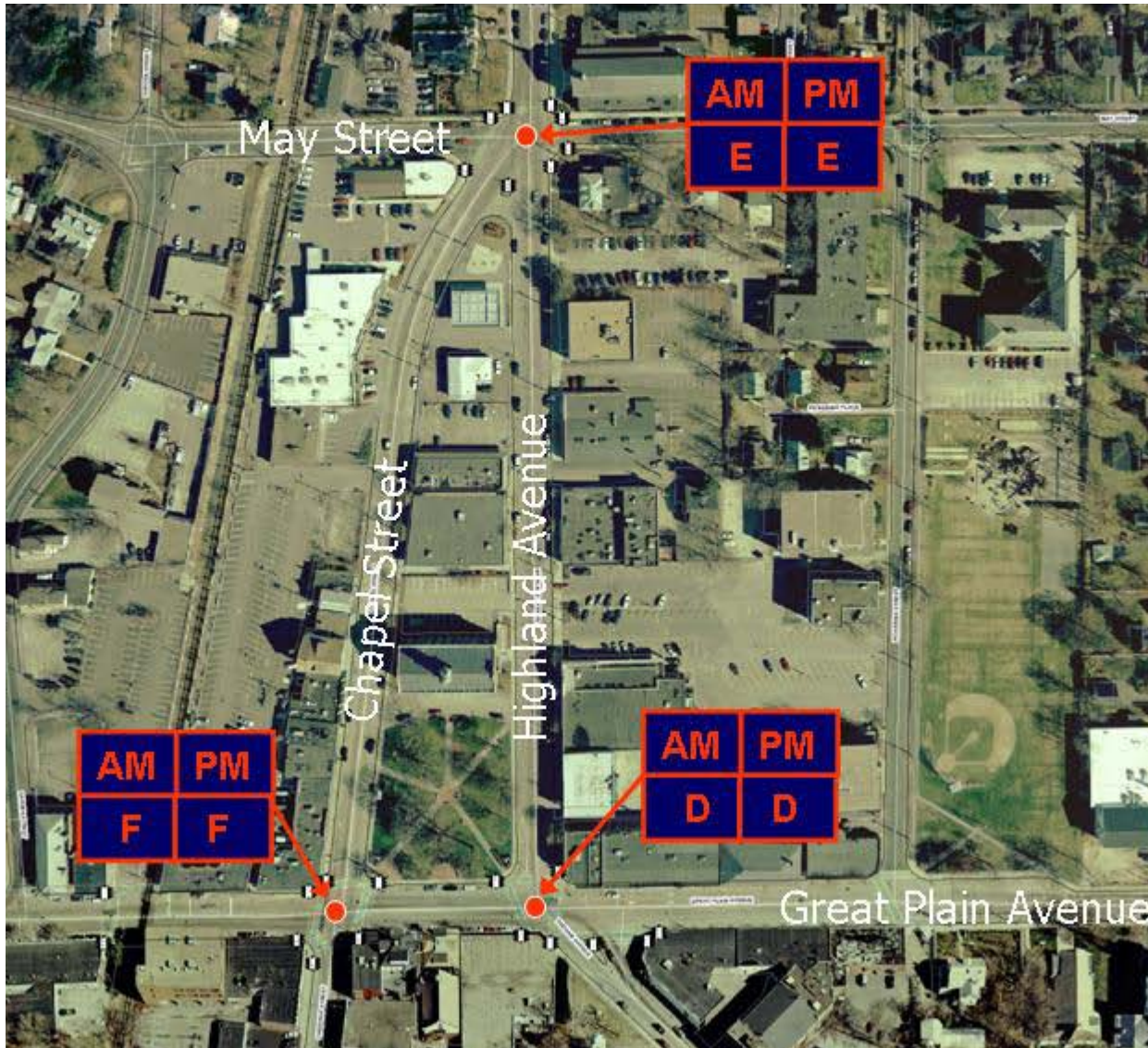
The main arterials through Needham Center carry large volumes of traffic, with the predominant flow occurring along Great Plain Avenue. Automatic Traffic Recorders (ATRs) were used to take traffic counts in March 2007. These volumes were compared with volumes collected by the town in 2000 (see Table 5 above). Overall, over the past seven years the greatest volume increase, 3.5 percent, occurred along Great Plain Avenue. The main volume change has been in the distribution of traffic, which has increased along the northbound and westbound approaches. This data also shows that volumes generally decreased along southbound and eastbound roads.

Existing Traffic Operations

Peak hour turning movement and classification counts were also performed in March 2007 during the weekday peak hours from 7-9 AM and 4-6 PM at the following four locations:

- Garden St/Great Plain Ave (Unsignalized)
- Chapel St/Chestnut St/Great Plain Ave
- Dedham Ave/Highland Ave/Great Plain Ave
- Highland Ave/Chapel St/May St

KEY INTERSECTIONS - EXISTING LEVEL OF SERVICE



See the Traffic, Parking & Pedestrian Study in the Appendix for pictures and observations of all intersections included in this study.

Level of Service (LOS) is the average time delay (measured in seconds) for vehicles to pass through an intersection and is based upon Federal and State standards. The best, LOS “A”, is 15 seconds or less and the worst, LOS “F”, is 80 seconds or more.

The intersections of Chapel Street and Dedham Avenue at Great Plain Avenue operate at level of service (LOS) F and D, respectively, during the peak hour commuting periods. The poor LOS is due to the inefficient and outdated traffic signal control system coupled with the at-grade railroad train pre-emption system. In addition, the close proximity of the intersections (approximately 200’ apart) with the at-grade railroad crossing also contributes to the poor LOS. These conditions provide limited queue storage for traffic at these critical intersection locations.

Signalization

Another factor contributing to the poor LOS and queuing problem at these intersections is the poor operation of the traffic signal coordination. Field investigations confirmed that while the signal system has interconnect cables, the two signals do not appear to be fully coordinated. The at-grade railroad crossing train pre-emption system is connected to the Chapel Street/Great Plain Avenue traffic signal system but not the Dedham Avenue/Great Plain Avenue intersection. During the train pre-emption phase these intersections experience severe queue problems, particularly along Great Plain Avenue.



Great Plain Ave/Dedham Ave/Highland Ave
Intersection - Looking East



Great Plain Ave/Chapel St/Chestnut St
Intersection - Looking North



Great Plain Ave/Dedham Ave/Highland Ave
Intersection - Looking North

Pedestrians

The crosswalks on Great Plain Avenue are not pedestrian-friendly, since they span distances up to 60' in length in order to allow for two parking lanes and four lanes of high speed traffic. Crossing distances are even longer at the intersection of Great Plain and Highland Avenue, which has a diagonal crosswalk that extends 70 feet.

The challenge for pedestrians crossing the street is further complicated by the long waits they experience along Great Plain at the intersections of Chestnut Street and Highland Avenue. There are exclusive pedestrian phases at the signals located at the intersections of Great Plain Avenue/Chapel Street/Chestnut Street and Great Plain Avenue/Highland Avenue/Dedham Avenue. Pedestrians

who activate the push button experience long delays of up to ten minutes. As a result, many pedestrians cross the street before the pedestrian phase is called.

The current crosswalk configuration at the corner of Great Plain Avenue, Highland Street and Dedham Avenue is also difficult for pedestrians. The geometry of the intersection results in extremely long crosswalks, some of which are difficult for pedestrians to cross within the existing pedestrian phase. The combination of the expansive intersection, unconventional crosswalk, and unpredictable pedestrian crossings also make this intersection confusing and dangerous for automobile traffic. In addition, much of the Great Plain Avenue sidewalk frontage is very narrow

which has a deleterious effect on the scale of the roadway. Chestnut Street suffers from a similar problem, although the roadway is narrower. Deep, inconsistent setbacks and a lack of pedestrian-scaled elements, such as street trees, create a sense of exposure and width that is inconsistent with pedestrian comfort. Throughout the downtown area, narrow sidewalks, the lack of street trees, and low-rise development all contribute to the uncomfortable walking environment.

The lane marking throughout the central business district and Chestnut Street make the area difficult to navigate for both vehicles and pedestrians. This conflict creates a safety problem and confusion that can be changed with improved lane markings. Signage is limited throughout the Study Area. By



Great Plain Avenue at Commuter
Rail Crossing - Looking East



Great Plain Ave/Chapel St/Chestnut St
Intersection - Looking East



Great Plain Ave/Chapel St/Chestnut St
Intersection - Looking South

incorporating better signage, those not familiar with the area would find Needham easier to navigate. In addition, better signage creates a strong sense of place for all who pass through. In coordination with traffic control, the adjoining pedestrian areas should be upgraded to clearly delineate the automobile and pedestrian environments.

See the Traffic, Parking & Pedestrian Study in the Appendix for pictures and observations for of all intersections included in this study.



Chestnut Street



Chapel Street Facing North Toward May Street
/Highland Avenue Intersection

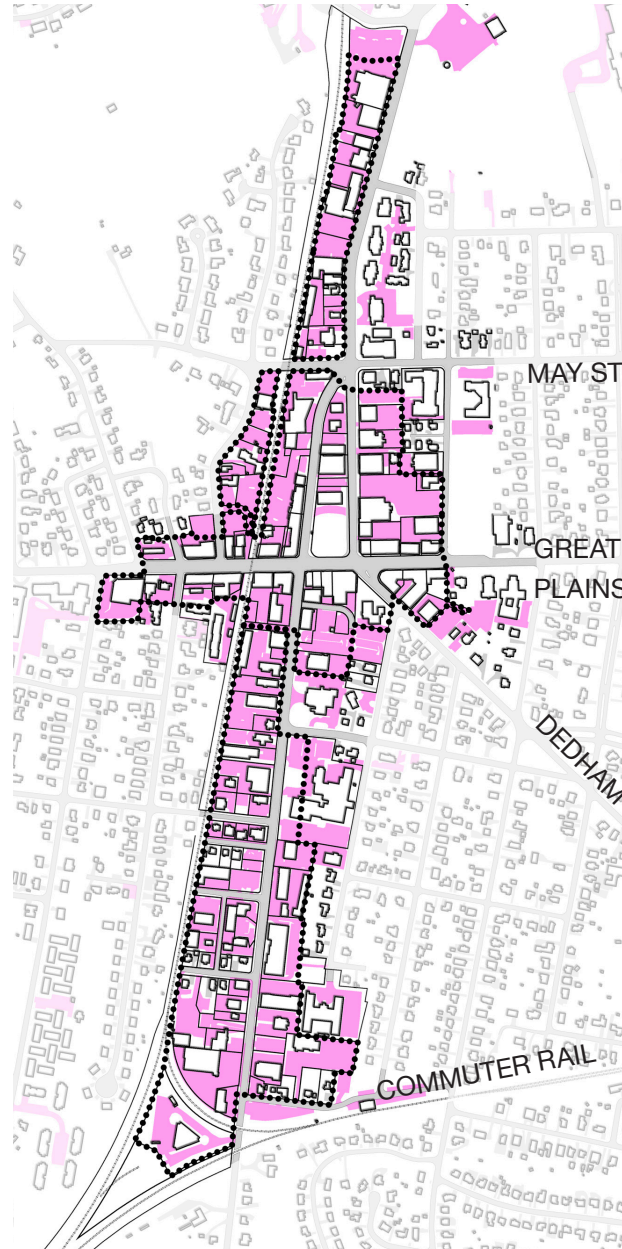
On-Street Parking

The Town of Needham currently maintains and enforces approximately 150 parking meters in the Downtown and Heights areas. The meters accept only quarters, and each quarter buys an hour of parking time up to a two-hour maximum. Because of their location, on-street metered parking spaces are primarily utilized by residents and out-of-town shoppers to access businesses and restaurants.

Off-Street Parking

The Town operates 10 municipal and commuter lots to serve the different needs of those who park in Needham. Some lots provide all day commuter parking, to serve those who utilize one of Needham's four MBTA stops. Commuter parking is enforced Monday through Friday and requires a payment of four dollars for a day. Needham also provides yearly permit parking to Needham businesses for the purpose of employee parking. In one of the downtown lots a business may purchase back-to-back partnered spaces for their employees, which allows them to park there as they wish. Currently, the buddy parking spaces available are not fully utilized. Signage for the parking facilities is not visible to motorists.

The **Dedham Avenue Lot**, located on the westbound side of Dedham Avenue near the intersection of Great Plain Avenue, contains both private and public parking (including handicapped spaces). The public parking consists of 26 spaces



OFF-STREET PARKING

- OFF-STREET PARKING
- LIMIT OF STUDY AREA



Source of Data: Town of Needham, MassGIS

Table 6

OFF-STREET PARKING						
LOCATION	3 HOUR SPACES	PERMIT SPACES	MBTA SPACES	HANDICAP SPACES	BUDDY SPACES	TOTAL SPACES
Eaton Square	15	36	25	2	0	78
Chapel Street	59	58 (6 daycare spaces)	9	7	0	133
Chestnut/Lincoln St.	100	16	0	4	62	182
Dedham Avenue	8	58	0	2	0	68
TOTALS	182	168	34	15	62	461

Source of Data: Town of Needham Parking Study 2003

marked for permit parking only, Monday through Friday between 8 AM and 2 PM, as well as several unmarked spaces. The reserved private parking spaces are for businesses adjacent to the parking lot. In addition, there is a section of the lot designated as the drop-off area for a daycare center which is signed “No Parking 7 AM to 6 PM”. The parking designation within this lot is confusing and not clearly defined.

The **Chestnut Street Lot** is located between Chestnut Street and Lincoln Street, near their intersections with Great Plain Avenue and Dedham Avenue, respectively. This lot contains spaces reserved for buddy parking, regular permit parking, 2-hour parking, and handicapped parking. Since the lot was re-arranged and reconstructed in 1999, it is in good condition except for some of the numbers marking the buddy spaces.

The **Chapel Street Lot** runs along the commuter rail tracks behind the strip of businesses that

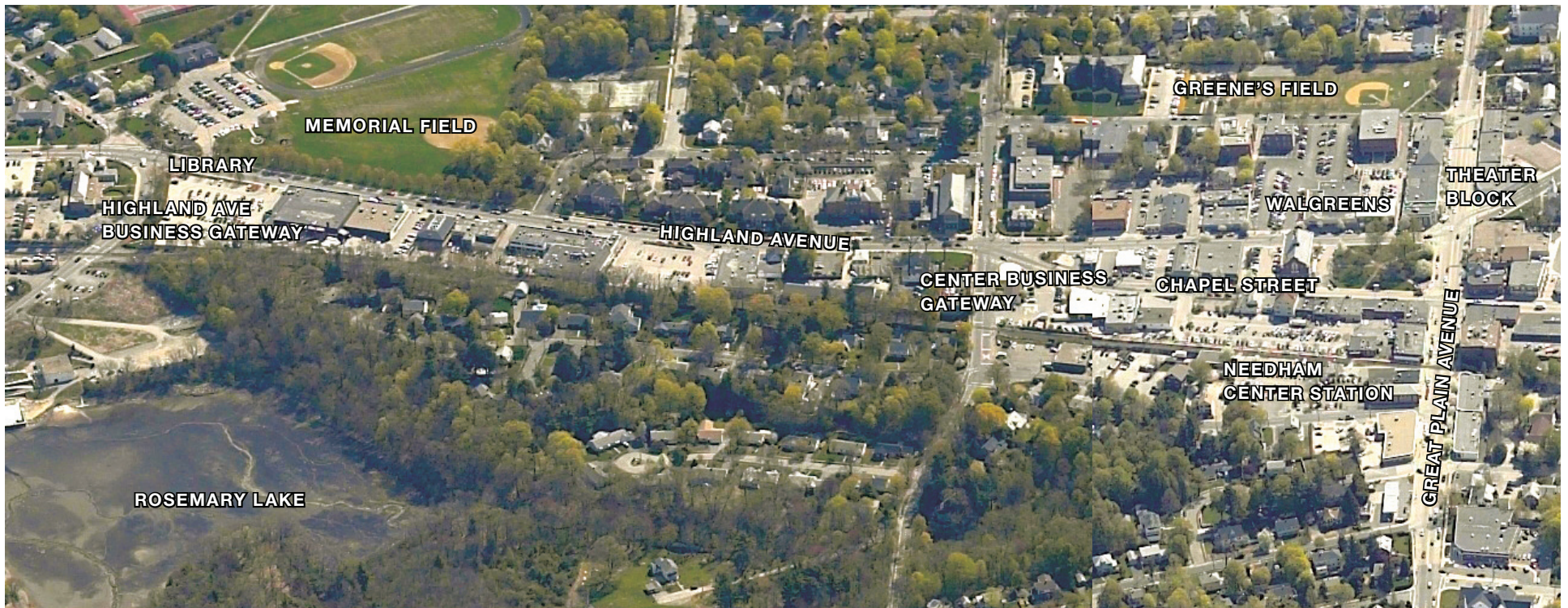
front on the western side of Chapel Street near its intersection with Great Plain Avenue. This lot contains spaces reserved for MBTA commuter parking, permit parking, 2-hour parking, and handicapped parking. Although the pavement surface is in fair condition, the paint on the MBTA collection box is peeling, which looks unsightly.

The **Eaton Square Lot** is located directly across from the MBTA Commuter Train tracks that border the Chapel Street Lot. In fact, both lots use the same payment collection box. This lot also contains MBTA commuter parking spaces, permit parking spaces, 2-hour parking spaces, and handicap spaces. The lot is in good condition overall but needs repainting.

Data from the 1988 report prepared by Wallace Floyd, Associates Inc., entitled Land Use, Zoning & Traffic Study, Needham Center, shows that these four municipal lots were utilized 86 percent of the time (over the course of a 10-hour observation in

December 1988). The peak hour of utilization for each lot varied somewhat; however, the peak lot utilization for the area as a whole occurred between 10 AM and 2 PM. At 2 PM each lot experienced 90 percent occupancy or greater.

While small business owners and consumers feel that there is not enough parking in Needham, analyses prepared by MIT in 2003 show that there is not a lack of parking spaces but rather, a lack of public parking. Making existing parking more efficient, adding on-street parking, creating more off-street lots, and converting existing lots to a parking structure could alleviate some of the parking problems.



Key Locations

The aerial photograph above gives a bird's-eye view of the Study Area and its three-dimensional form. Key locations are identified and discussed below:

Highland Ave Business District

Highland Avenue Business Gateway (Intersection of Highland Avenue and Rosemary Street) is a major vehicular entry to the Study Area. Prominent public assets surround this gateway: Memorial Field, with the adjacent high school, Needham Public Library and the Rosemary Lake recreational

facility. There is an opportunity for placemaking at this significant nexus.

Center Business District

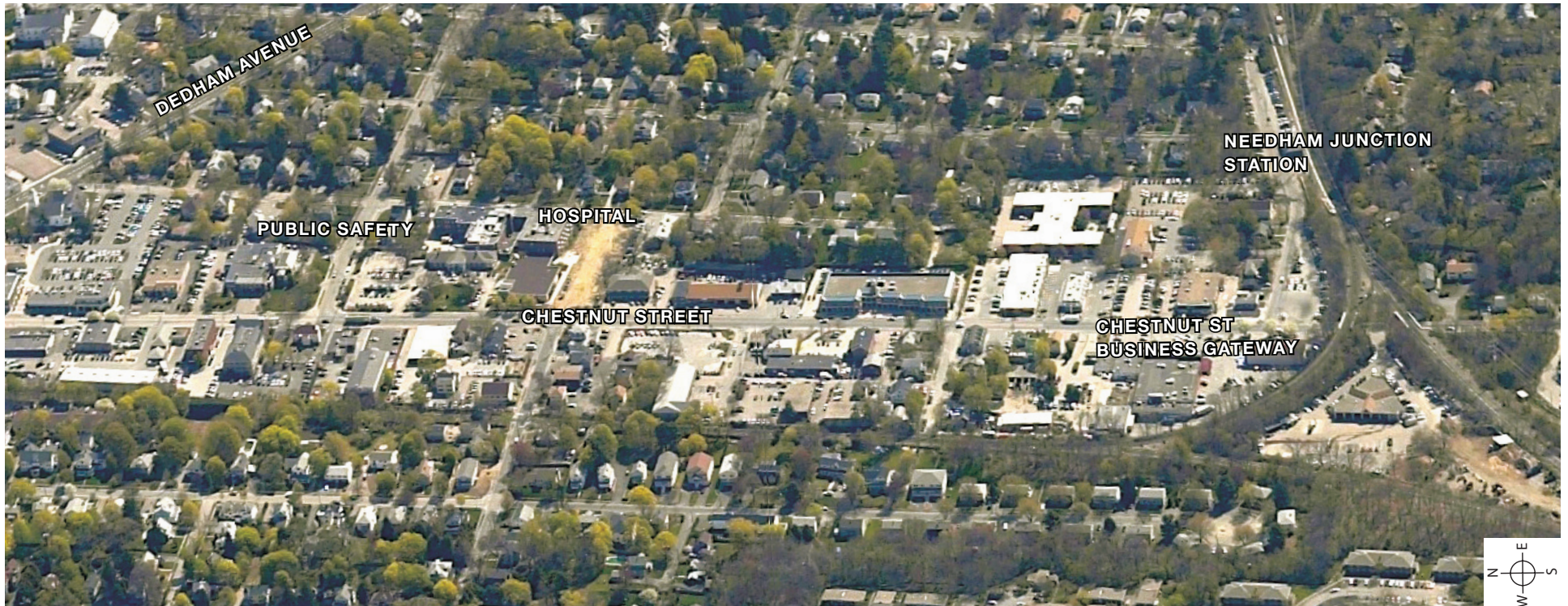
Town Hall/Town Common is the visual and historic anchor of Needham Center. There are opportunities for improvements to both to enhance their role as the visual and social focus of Needham Center.

Needham Center Station, although heavily used, has little sense of place and is perceived more as a

parking lot than a key transportation focal point. There is an opportunity to create a focal point for transit-oriented developments (TOD).

Center Business Gateway (Intersection of May, Highland and Chapel Streets) is a major vehicular entry point into the Center Business District. Its current configuration is confusing to drivers, unappealing to pedestrians and has no sense of place as a gateway.

Greene's Field/Stephen Palmer Block is under the Town's control and represents a variety of



development opportunities to further the objectives of downtown development.

Walgreens Building and Parking Lot are underdeveloped and do not complement the character of the Center Business District. This parcel represents a significant opportunity because of its size and location.

The Theater Block is a collection of underdeveloped parcels. The theater has been demolished, the remaining lobby is vacant, two adjacent parcels to the south are under utilized or undeveloped and

do not complement the character of the Center Business District.

Chestnut Street Business District

Needham Junction Station, like Needham Center Station, has a high volume of users and is an opportunity for another TOD as well as a landmark at the southern end of Needham Center.

Chestnut Street Business Gateway (At Chestnut Street where it passes underneath the rail line) does not have the same volume of traffic as the northern

gateways identified above. Nevertheless, there is an opportunity for placemaking at the southern entry to Needham Center.

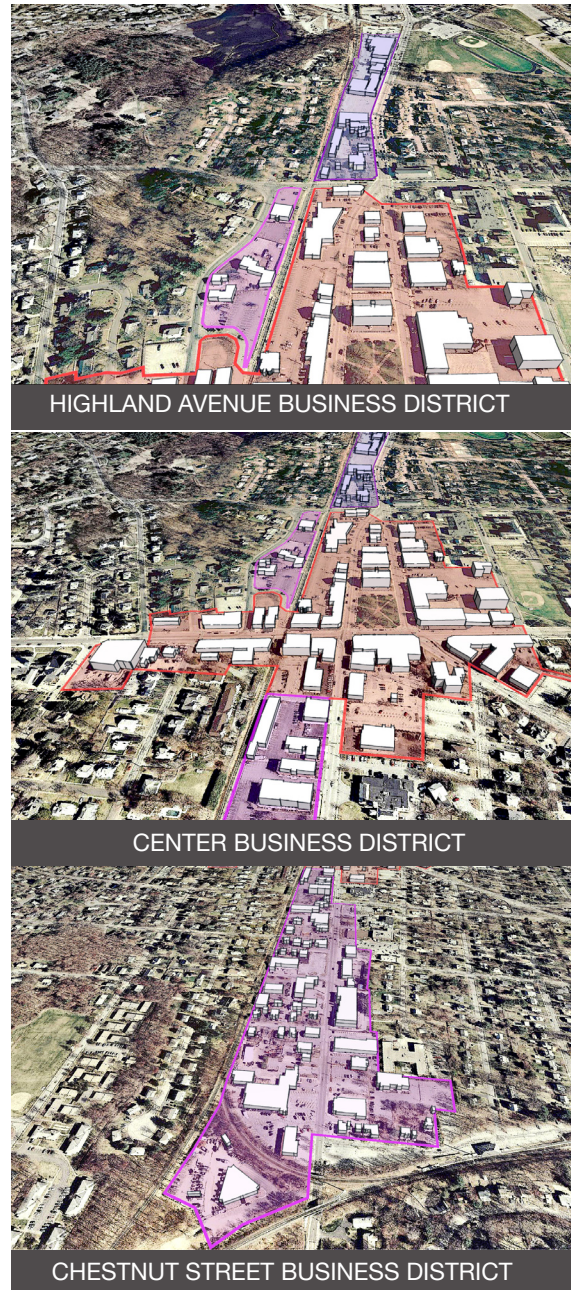
Chestnut Street Parking Lot, although one of the better Town-owned parking lots, presents another development opportunity because of its size and location.

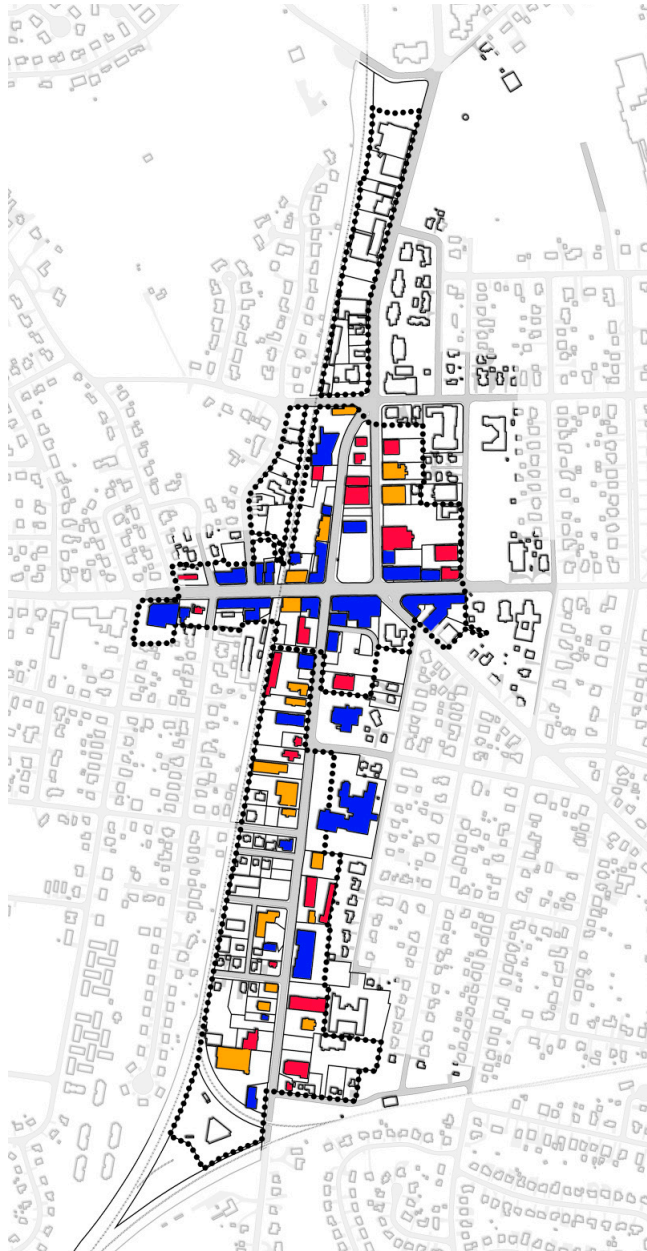
Overall Appearance

In general, Downtown Needham suffers from a limited sense of physical identity. The quality of built form and public space is diminished by the following:

- Throughout the Study Area buildings lack a scale appropriate for a village center. Varying building heights around the Common detract from this visual and historic anchor to Needham Center. Historically, buildings in Needham Center consisted of two to three floors of mixed-use development which provided a sense of enclosure for pedestrians and visually de-emphasized the roadway.
- Inconsistent building setbacks and wide gaps between buildings further detract from a sense of scale. This lack is most prevalent along Chestnut Street, with its inappropriate deep setbacks.
- The appearance of buildings varies throughout the Downtown. See the Building Compliance Map on page 31 for an analysis of buildings' compliance with Needham's Design Guidelines.
- Streetscape conditions are discussed in a separate section which follows.

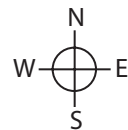
3-D MASSING STUDY





BUILDING COMPLIANCE WITH DESIGN GUIDELINES

- GENERALLY COMPLY
- COMPLY WITH SOME STANDARDS
- NOT IN COMPLIANCE
- LIMIT OF STUDY AREA



Source of Data: MIT Study, Hester et. al., 2003

Methodology

This analysis is based on an evaluation of the appearance of existing buildings conducted for one of the MIT studies (Hester, et. al). Existing buildings in the Center, Chestnut Street and Business Districts were evaluated for compliance with new construction standards in Needham's *Design Guidelines for Business Districts*, 1995. Specifically, the standards established under Guidelines for Private Development, Section 1 - Buildings and Facades - were used to evaluate existing buildings.

Analysis

Using these standards, existing buildings are identified in the plan to the left as follows:

- Buildings generally complying with the standards are blue.
- Buildings complying with some of the standards are orange.
- Buildings not complying with the standards are red.

The standards include building height, location on site and facade composition, materials and signage.

This analysis indicates that the best collection of built form is along Great Plain Avenue and the worst is along Chestnut Street.



Town Hall complements the Town Common.



The architectural style and height of this building make it an attractive backdrop to Town Hall and Common.



Attractive signage and retail display enhances this storefront.

Streetscape Conditions

While there are pockets of successful streetscape in Downtown Needham, as a whole the Study Area suffers from a limited sense of physical identity.

Streetscape Conditions - Assets

Assets include:

- Attractive public spaces such as Town Common, Greene's Field and Memorial Park.
- Town Hall.
- Some stretches of sidewalk that are well maintained and inviting for pedestrians.
- Successful restaurants and businesses that add life to the streetscape.



A retailer's banners enliven the streetscape.



A sculpture provides a focal point in the park like setting of Town Common.



Facade materials of brick, stone and accent granite complement this retail display.



This alley has been improved with a ceremonial gate, lighting and preservation of historic signage.



This streetscape has been improved by widening of the sidewalk, storefront and landscape improvements.



Flower beds and another sculpture provide another focal point in the Town Common.



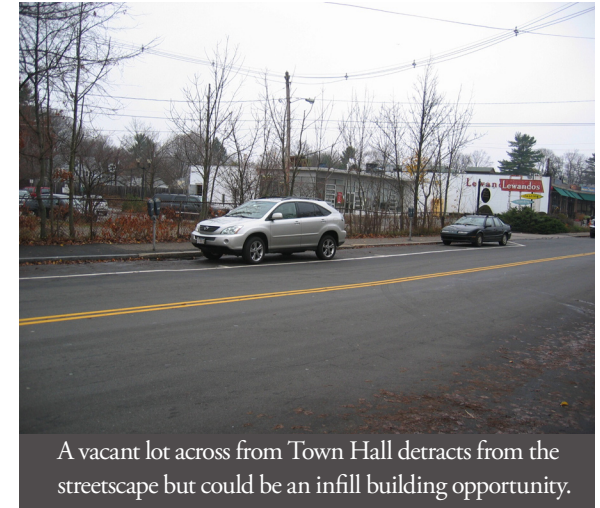
This back of building facing a parking lot has been improved to create a second storefront.



Mature trees add to the park-like setting of the Town Common.

Streetscape Conditions - Deficits

- Inconsistent building setbacks, particularly in the Chestnut Street area.
- Inconsistent building heights. Overall, there is a lack of building height with a predominance of one story buildings.
- Buildings with blank walls, uninteresting street facades, or discontinuous frontage.
- Inconsistent sidewalk treatments and streetscape elements. There are few amenities (street lights, benches etc.).
- A lack of landscaping, especially along Chestnut Street.
- Too many curb-cuts and driveways interrupting sidewalks.
- Buildings with significant set-backs from the street, especially in the Chestnut Street Business District.
- An abundance of off-street, surface parking fronting the street and creating gaps between buildings.
- A shortage of crosswalks, and existing crosswalks that are forbidding.
- An absence of continuous, visible pathways between different centers of activity.
- A lack of signage and wayfinding, including the marking of gateways into downtown.





Lack of a sidewalk and the dominance of off-street, storefront parking undermine the pedestrian experience.



A non-descript gateway to the Chestnut Street Business District.



Lack of appropriate landscaping, too many curb cuts and materials all detract from the pedestrian experience.



Another unadorned alley across from Town Hall is a missed opportunity.



Narrow sidewalks and intrusive traffic signage take away from the pedestrian experience.



This parking lot across the street from Town Hall detracts from the Town Hall setting.

Premises and Scope

The Market Analysis includes an evaluation of retail, office and housing segments of the real estate market for the Study Area. Data was collected from interviews with Needham planning officials and real estate professionals active in the Study Area. Pertinent demographic data, historical sales data, absorption data, historical demand data and existing and pending supply data were compiled and analyzed. In addition, current and expected general economic conditions for the region were examined. Finally, a five-year projection of the market was made based on this research. All data, analysis and conclusions are based upon facts in existence as of June 2007. See the Market Analysis Report in the Appendix for complete documentation of this research and analysis.

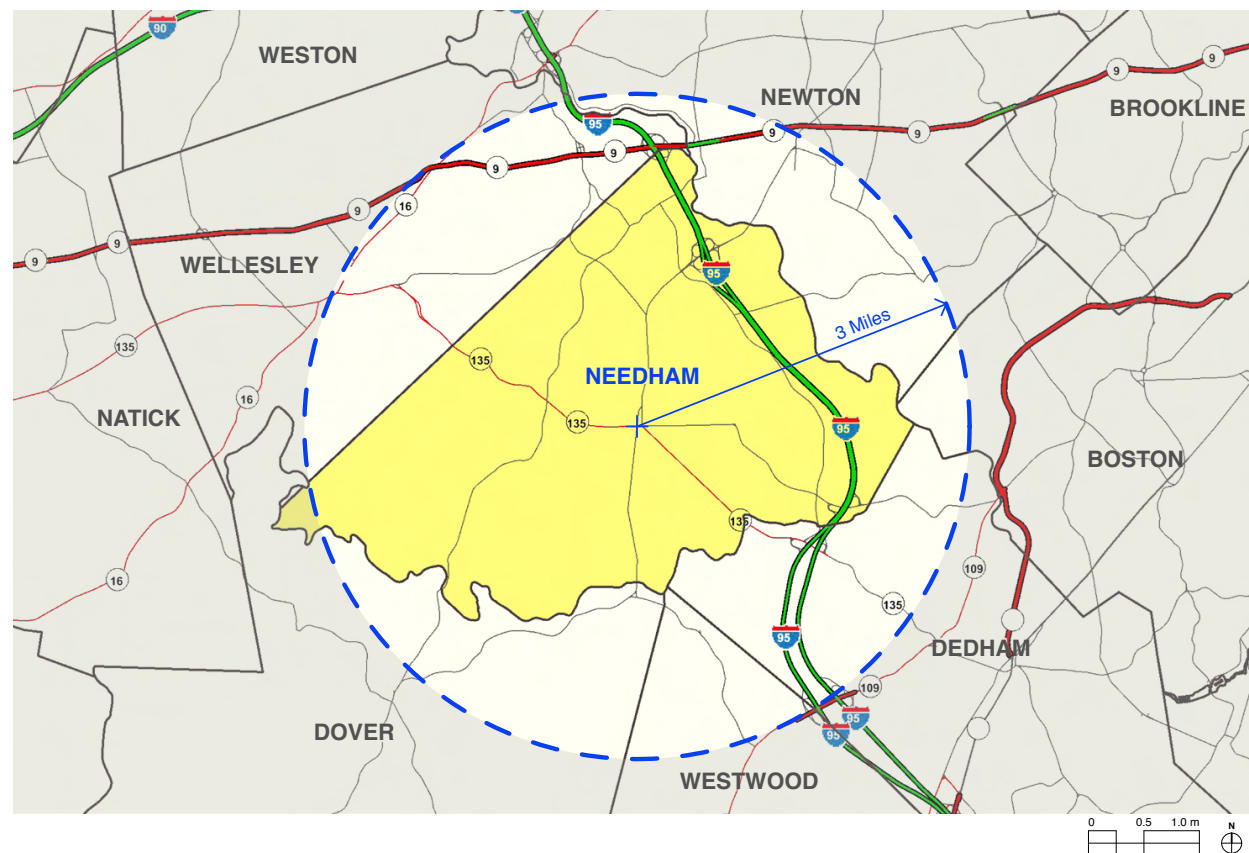
General Economic Conditions

Regional and national economic indicators show moderate job growth, a fairly confident consumer and a strong stock market (2007-2008). During the time period of this study, economic conditions were positive including short term projections.

Retail Market

The Study Area retail market consists of approximately 573,000 SF of mainly class B and C space. Despite the drawbacks of limited on-site parking, occupancy is high with a vacancy rate under 4 percent.

3-MILE RADIUS FOR RETAIL MARKET DATA



The current demand for the retail market was evaluated by looking at spending patterns within a three-mile ring around the Study Area. See the map above. The Study Area contains 43 percent of the 1,700,000 SF of retail space estimated to be within this ring. The median income of these 18,784 households is expected to grow by 25 percent in five years. This information combined with existing

retail purchases suggests that the demand for retail space outstrips the current supply.

Using industry data for the region and adjusting this data for the Study Area specifically, this retail gap of \$500,000,000 on goods and services translates into an excess demand of 235,000 SF, as shown in Table 7 to the right.

Table 7

EXISTING RETAIL DEMAND POTENTIAL			
INDUSTRY GROUP	SUPPLY (RETAIL SALES)	DEMAND (POTENTIAL)	RETAIL GAP
Furniture & Home Furnishings	\$ 28,049,370	\$ 56,373,208	\$ 28,323,838
Building Materials, Garden Equip/Supply	\$ 21,847,309	\$ 44,332,125	\$ 22,484,816
FOOD & BEVERAGE: Grocery	\$ 118,894,074	\$ 210,036,622	\$ 91,142,548
FOOD & BEVERAGE: Specialty Food	\$ 1,524,524	\$ 6,977,148	\$ 5,452,624
FOOD & BEVERAGE: Beer, Wine & Liquor	\$ 8,931,885	\$ 24,047,878	\$ 15,115,993
Gasoline Stations	\$ 23,983,048	\$ 102,422,489	\$ 78,439,441
Clothing & Accessories	\$ 23,269,143	\$ 91,794,253	\$ 68,525,110
General Merchandise	\$ 38,390,814	\$ 57,463,046	\$ 19,072,232
Miscellaneous	\$ 18,856,479	\$ 24,987,750	\$ 6,131,271
Food Services & Drinking Places	\$ 106,201,238	\$ 178,677,791	\$ 72,476,553
TOTAL RETAIL GAP (3 MILE RADIUS)			\$ 407,164,426
Existing Retail Square Feet in 3 Mile Radius		1,700,000 SF	
Existing Retail Square Feet in Downtown Needham		573,070 SF	
Downtown % of Larger Market		34%	
Potential Demand for Retail Space in 3 Mile Radius		936,010 SF	Using \$435 for sales/SF
Downtown's Current Pro Rata Share of Existing Demand		315,529 SF	Max amount of demand if current pro rata share captured
Assuming 75% Capture of its Current Share		236,647 SF	Reasonable given trend of little new development in past 20 yrs
ROUNDED		235,000 SF	

Projecting population and median household income over the next five years results in a demand for an additional 10,000 SF. Including the existing demand above, there is a total of 245,000 SF of projected demand over the next five years.

Office Market

The office market in the Study Area includes

283,000 SF of mainly class B and C office space with a vacancy rate of 5 percent. The Study Area contains 9 percent of Needham's total office space of just under 3,200,000 SF. Much of this space is on the 2nd and 3rd floors of buildings with retail on the first level. A significant portion of the office space on Chestnut Street is occupied by doctors and medical specialists affiliated with Beth Israel

Deaconess Hospital-Needham.

For the next five years there is a projected total demand of 50,000 SF of additional office space in the downtown most of which is related to medical offices.

In addition to the 2,778 SF, discussions with representatives of the hospital indicate they would lease 30,000 SF of office space for physicians right now in the Study Area, if it were available. They have already committed to lease the entire new 10,000 SF office building on Chestnut Street. Furthermore, hospital representatives have indicated that the planned Phase 1 expansion will create demand for an additional 30,000 SF of office space.

Taking into account the discussion above, including projected job growth, the current and future demand related to the hospital and the current offsetting supply of new office space, the demand for office space over the next five years is 50,000 SF, as shown in the Table 8, on page 32.

Housing Market

There are approximately 70 units of housing in the Study Area. This includes a 28-unit apartment complex on Chestnut Street that is reserved for adults 55 years and older, and a 6-unit moderate income condominium development on Junction Street. Both of these developments were constructed in 2000 - 2001.

Based on a review of existing market conditions there is little to no demand at *present* for *new* housing in Needham. The market is in balance. Projected population growth/household formation is the primary driver for projected *future* housing demand. The projected five-year demand for *new* housing in all of Needham is 143 owner-occupied units and 31 rental units. This relatively low population/household growth projection is not unique to Needham. Demographers simply consider most municipalities along and inside the Route 128 at or near a maximum build-out situation.

The above demand is now offset by pending supply. Based upon records of development activity provided by the Needham Planning Department, at least 375 new rental units are in the pipeline and 150 new owner-occupied housing units can be expected, based upon recent trends. In addition there will be some demolitions to reduce existing supply. In 2006 there were 25 demolitions.

Taking into account these figures, the projected need for housing in all of Needham over the next five years is actually *negative*, based on a traditional numerical model for projecting demand for real estate.

However, market evidence presents examples of new development, in downtown areas near commuter rail lines, within towns with similar

Table 8

OFFICE DEMAND POTENTIAL - FIVE YEAR FORECAST	
Existing Office Space, All Classes, in Needham	3,152,045 SF
Existing Office Space in Downtown Needham	283,453 SF
Downtown Needham's percent of Larger Market	9 percent
Existing Workforce in Needham	13,158
Percent In Industries Using Office Space	78 percent
Projected Increase In Needham Workforce in 5 Years	132
Number of New Workers Using Office Space	103
Potential SF of New Demand for Office Space in Needham in 5 Years (300 SF/person)	30,888 SF
Downtown's Pro Rata Share of Potential New Demand	2,778 SF
Existing Excess Demand for Office Space from Beth Israel Deaconess Hospital-Needham	30,000 SF
Projected Additional Demand Assuming Phase 1 Expansion in 2-4 years	30,000 SF
Anticipated Downtown Deliveries of Office Space	10,000 SF
Projected Excess Downtown Demand for Office Space in 5 Years	52,778 SF
Rounded	50,000 SF

Table 9

SUMMARY - FORECASTED FIVE YEAR DEMAND				
MARKET SEGMENT	POTENTIAL DEMAND 5 YEAR FORECAST	LIKELY DEMAND (SF)		
		High 40%	Moderate 30%	Low 20%
Retail	245,000 SF	98,000 SF	73,500 SF	49,000 SF
Office	50,000 SF	20,000 SF	15,000 SF	10,000 SF
Housing	168,000 SF*	67,200 SF	50,400 SF	33,600 SF
TOTAL	463,000 SF	185,200 SF	138,900 SF	92,600 SF
* Based on 140 units x 1,200 SF average size/unit				

Conclusions

There is a projected demand for additional development over the next five years in the Study Area, as summarized in Table 9 above. This table gives overall *potential* demand and then a likely range of how much actual development will occur in terms of high, moderate and low estimates. The projections of demand presume that sufficient on-site or nearby parking could be accommodated for future developments.

See the Market Analysis report in the Appendix for additional detail including rental and sales rates, capitalization rates and the general conditions for each of the market segments that has been evaluated.

low growth projections to Needham that have succeeded in the past few years. Two examples are Station Crossing in Melrose and Wakefield Crossing in Wakefield. These are 48-and 164-unit condominium developments, respectively, near MBTA commuter rail lines. The former sold out in 2005 and the latter is near sellout despite tough market conditions. The developments appeal to both young professionals seeking convenience to the MBTA and major highways, and the 55+ buyer that wants new construction and convenience to downtown attractions. A limited number of small

to mid-scale projects in the Study Area would enjoy similar success.

Therefore, while statistical evidence suggests that any demand for future housing in Needham and the Study Area will be satisfied with projects currently being planned, market evidence suggests that two or three small projects, between 16 and 48 units each, would succeed in the Study Area, either as condominium or rental housing.

KEY ASSETS AND CHALLENGES

The map on these two pages identifies:

- Those properties that are currently assets to the downtown.
- Those properties that are underdeveloped.
- The extent of property that is open, either as vacant land or surface parking.
- Potential redevelopment sites.

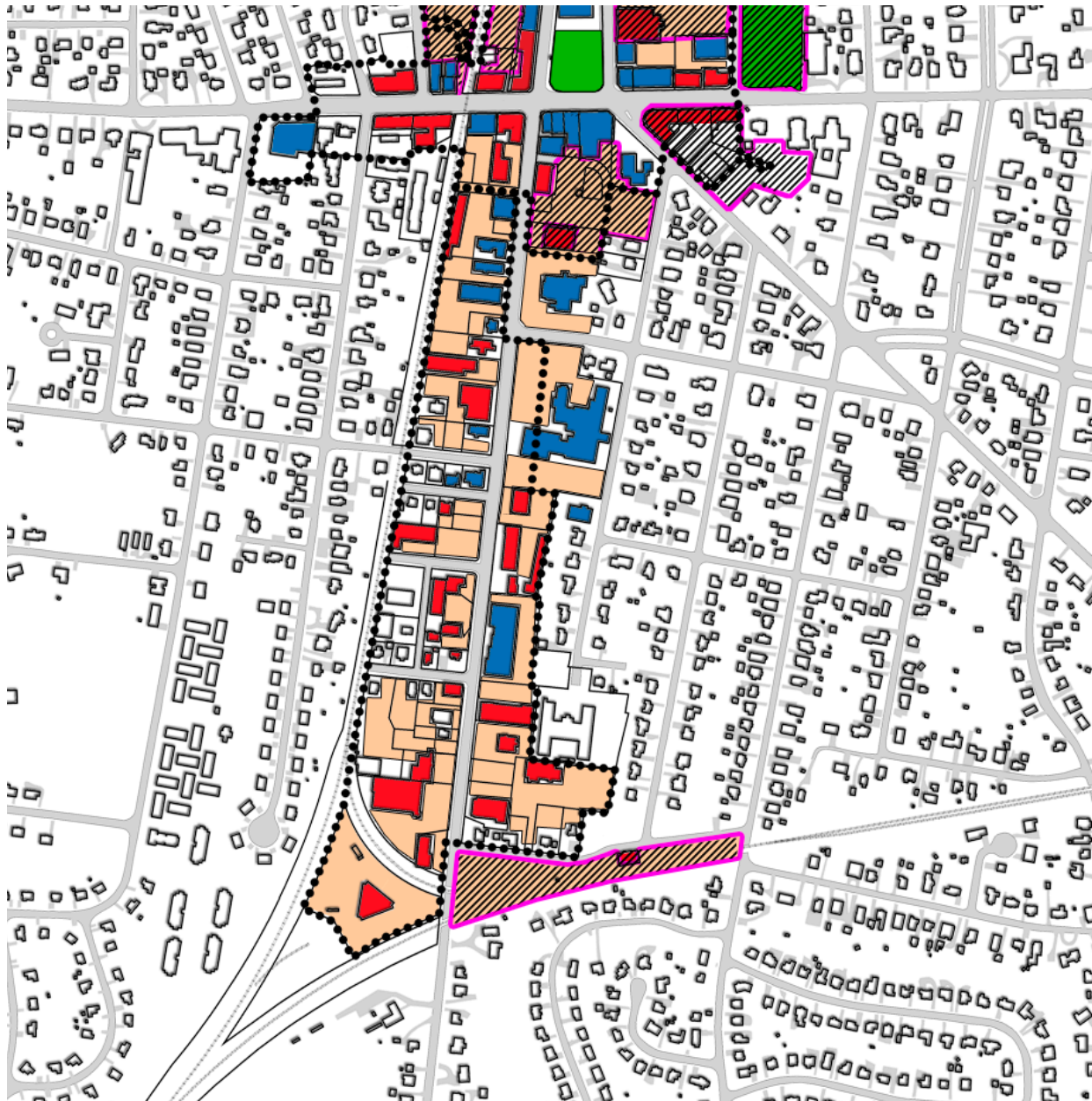
Key assets include:

- Public open spaces, including Town Common and Greene's Field.
- Successful restaurants and businesses.
- Town Hall and several buildings with heights and architectural styles that complement it.
- Some sections of sidewalk that offer a pleasant pedestrian experience.
- Activity generators, including two train stations, playing fields at Greene's Field and Memorial Park, Town Hall and the Hospital.

Key challenges include:

- Few and poorly marked connections.
- Absence of pedestrian crossings and some difficult intersections for pedestrians.
- Unimproved sidewalks with few amenities to create a pleasant pedestrian environment.
- An excess number of curb cuts.
- An abundance of surface parking lots, many fronting the street.





OPPORTUNITIES

- ASSET
- UNDERDEVELOPED PROPERTY
- VACANT LAND/SURFACE PARKING
- POTENTIAL REDEVELOPMENT SITE
- LIMIT OF STUDY AREA

- Buildings with uninteresting facades or blank walls facing the street.
- Buildings with significant set-backs from the street and significant gaps between buildings fronting the street.
- Lack of signage and wayfinding to identify the downtown and its features.
- Lack of signage and placemaking at the gateways into downtown.
- Lack of indoor public spaces for cultural activities.
- Limited retail mix.
- Lack of a diversity of downtown residential options.
- Lack of evening and weekend activities.

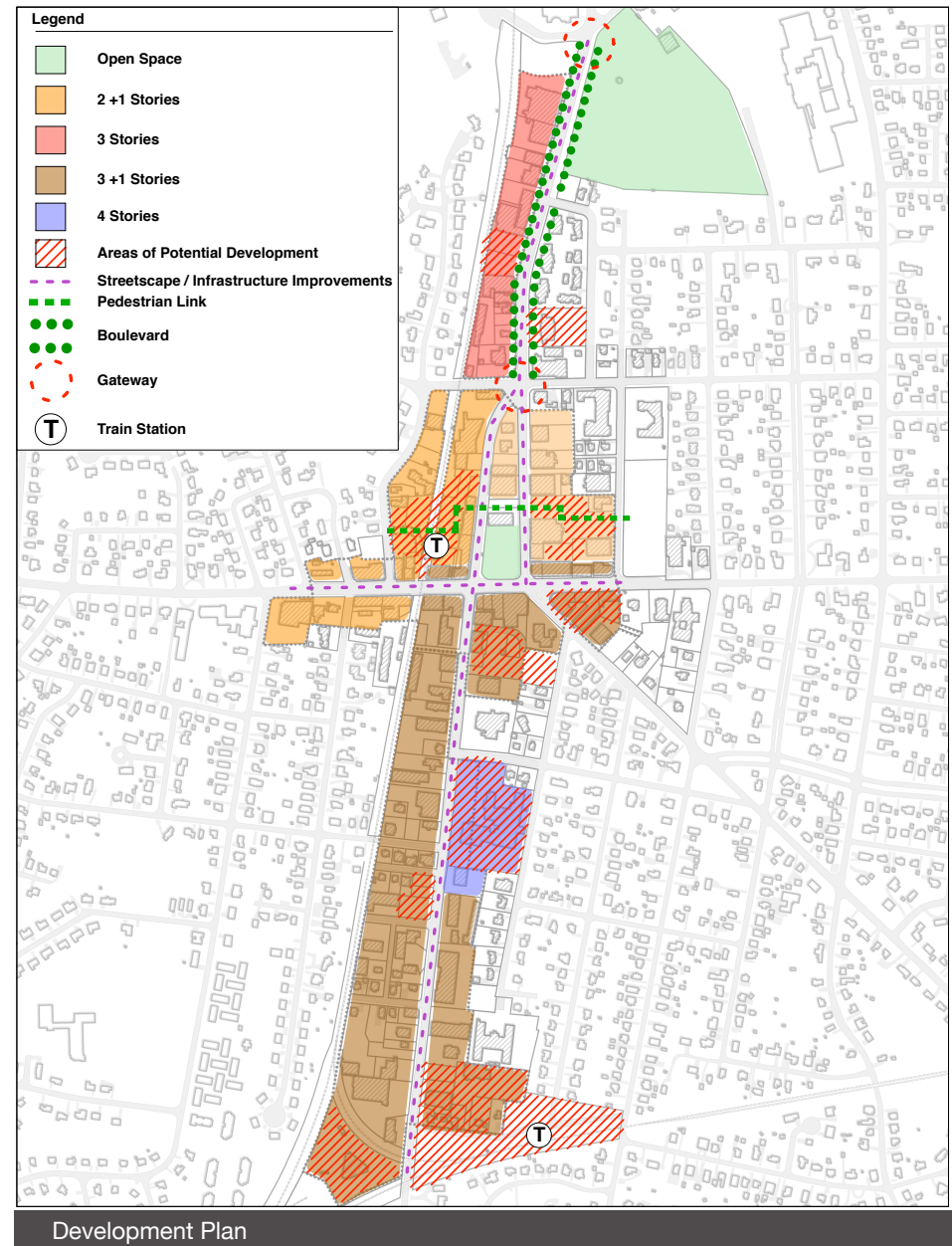
DEVELOPMENT PLAN

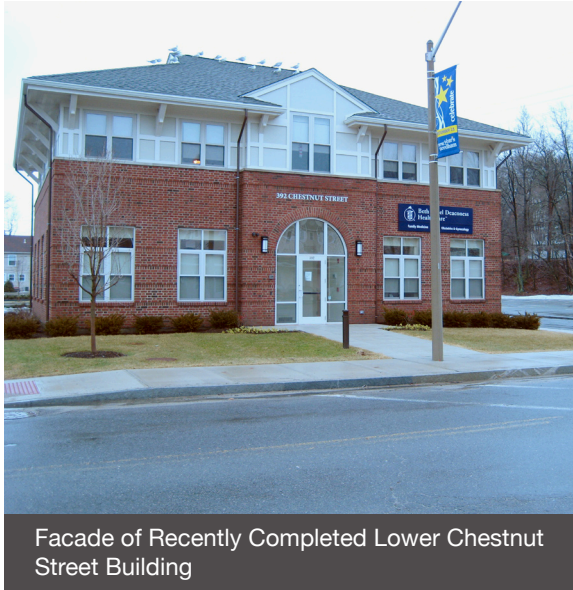
A thriving downtown business district is critical to the Town of Needham. It is an important component of community identity and character, provides shopping and dining amenities, and generates sales-tax revenue and employment opportunities that stimulate the local economy. The Town of Needham has an unprecedented opportunity to reshape development opportunities, zoning, design guidelines and streetscape within the downtown area, making Downtown Needham a vibrant destination into the foreseeable future.

The Development Plan conveys the objectives and priorities necessary to foster the area's development as a mixed-use, local downtown business district.

It provides land use strategies that address new development, parking and traffic issues, zoning changes, enhancement of existing businesses, increased pedestrian activity and protection of adjacent residential areas.

The Development Plan recognizes direct commuter rail service to Boston as a key asset of Downtown Needham. Both stations in the Study Area, at Needham Center and Needham Junction, provide opportunities for transit-oriented development. The Development Plan encourages smart-growth projects that are environmentally sensitive, economically viable, community-oriented and sustainable. These projects will reinforce the town center's role as an integral component of a healthy regional economy.





The Development Plan conveys the objectives and priorities of this study:

- Encourage new development that creates defined street edges and streetscape improvements conducive to a village environment and a walkable downtown.
- Encourage increased density and greater building heights.
- Encourage redevelopment of existing buildings and facade improvements.

Design standards are advocated both for public improvements and private development. This

report references and updates the *Design Guidelines for Business Districts* prepared by the Town in 1995. It includes standards for buildings, facades, storefronts and signage. Public improvements include street furnishings, improvements to town-owned parking lots and the town common. The Development Plan incorporates these guidelines and elaborates further where appropriate. It also establishes standards for massing, setbacks and other design elements.

The rendering above illustrates the range of standards for streetscape elements. The goal of these design standards is to create vibrant urban spaces along the main streets extending out from

the Town Hall and Town Common, which serve as the civic center and hub of Downtown Needham.

The enhancement of the downtown's pedestrian character and the addition of amenities will contribute to an active street life. The redevelopment of Chapel Street, as shown in the photograph above, is one example of a successful enhancement to the streetscape of Needham Center.



Historical Precedents

The vision for this plan looks back to historic Needham Center and the traditional New England village for inspiration and reinterprets it for contemporary life.

For two centuries traditional New England villages thrived. At their best they were densely populated with two and three-story buildings that housed a diverse mix of commercial, residential and civic uses. Economic, social and civic activities were conducted in these town centers while outlying areas remained rural.

Needham Center Circa 1900. Clockwise from Upper Left: Aerial Rendering; Moseley-May-Bourne Building at the Southwest corner of Great Plain Avenue and Chestnut Street; and the Kingsbury Block on Great Plain Avenue

Contemporary Precedents

For the past hundred years, the increasing reliance on automobiles and use of zoning laws promoted a suburban development pattern dispersing commercial development and taking away from the focus and livability of the town center.

In response there is a movement advocating the village concept, also known as traditional neighborhood development (TND) or New Urbanism. Mashpee Commons, as shown in the photographs to the right, is one such example of a successful, contemporary TND. The elements of the village concept, as they are applied in New England in particular, include:

- Diverse, mixed-use districts combining residential, commercial and civic uses in a compact area;
- A balance of public and private spaces to enhance identity and value;
- Emphasis on building community, promoting walkability and increasing affordability;
- Use of traditional New England towns as a model for the future. TND should also be true to the significant historic context of the community;
- Increased utilization of public transportation.

Needham Center's two commuter rail stations afford it the opportunity for transit-oriented development (TOD), which complements the above-stated principles of the village concept and further promotes transportation choices, reducing automobile usage.



Mashpee Commons 1986 - Present

Intrinsic to the challenge of making a neighborhood genuinely walkable is providing destinations, such as shops, restaurants and community spaces. However, ensuring that those places are both walkable and economically viable requires a certain minimum level of development.

Retail destinations located within a short walk of residences and offices depend upon pedestrian traffic for their customer base. Higher density development contributes to the viability of a wider range of businesses, ultimately resulting in more destinations that are walkable for residents and workers.

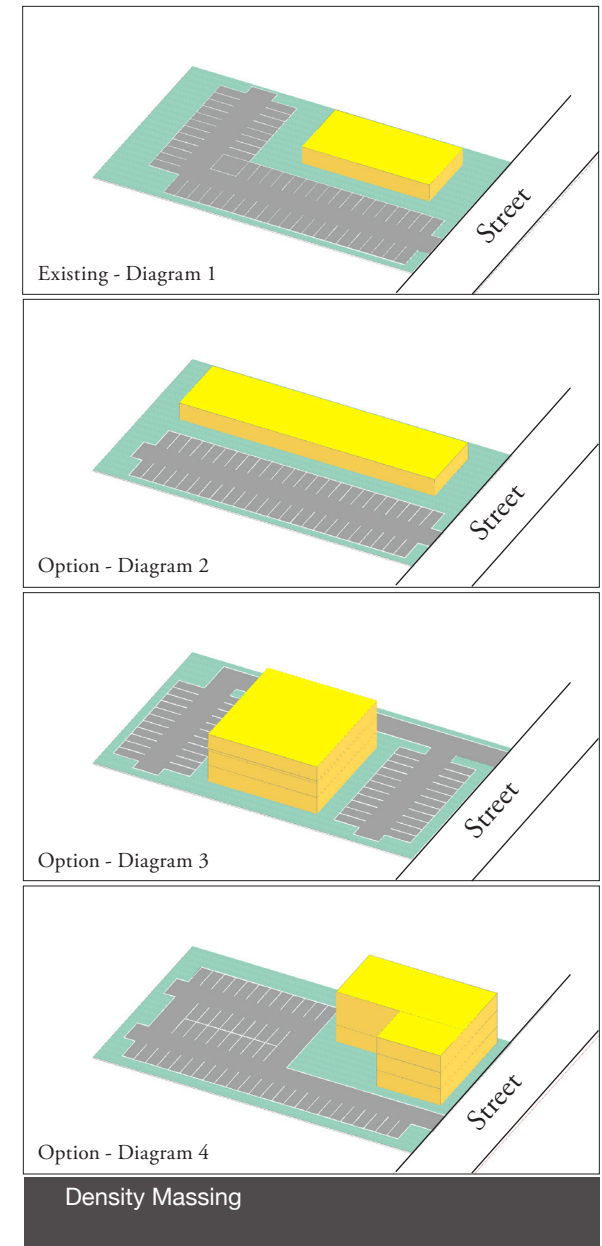
Projects of a village can provide a variety of townhouses, apartments, accessory units and even live-work spaces to accommodate a broader range of lifestyles. This greater range of housing types expands housing choices within a neighborhood and allows residents to choose housing that meets their changing needs and preferences over their lifetime.

Transportation choices give people the freedom to walk, take a bus or train, or bicycle for part or all of their daily travel. Bringing more workers and residents into the town center creates choice by providing the ridership needed to make bus and rail transit a viable and competitive transportation option.

More activity as a result of more workers and residents in the town center also has the potential to increase area social interaction and consequently deter crime. The key to improved security is a design that encourages greater neighborhood surveillance and interaction. Well-designed urban neighborhoods create a welcoming pedestrian environment that encourages neighbors to meet and “take ownership” of their common spaces.

Increasing the size of development in Downtown Needham will encourage economic vitality and redevelopment of properties. Furthermore, increased size and massing provides the opportunity to better define and improve the downtown village spaces along the major streets.

The Development Plan proposes new zoning regulations to encourage massing that helps define the street edge and that serves as a backdrop to the streetscape. In the Density Massing diagram to the right, Diagram 1 shows existing massing and parking of a prototypical property. Diagrams 2, 3 and 4 show different ways this existing property can be redeveloped. The approach represented in the diagram best serves to improve the urban form of the street by bringing the building to the street and putting parking behind the building.



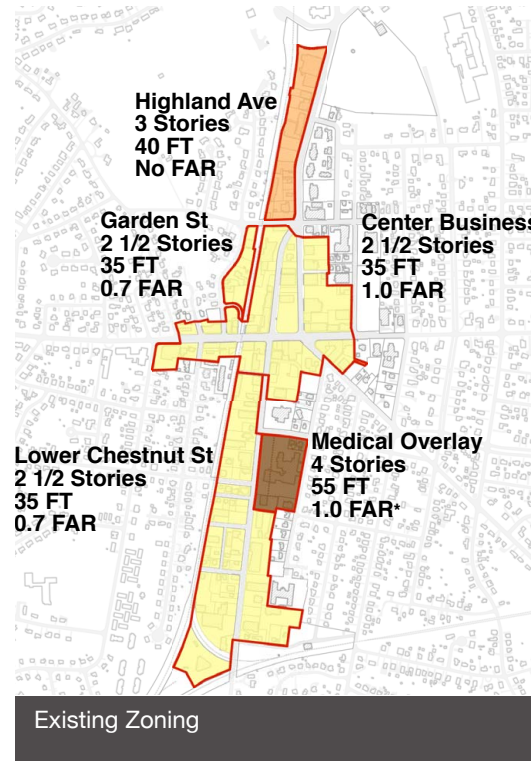
The plans to the right compare maximum number of stories, heights and floor area ratio (FAR) allowed under current zoning regulations with that proposed in the Development Plan.

There are a total of four proposed overlay zoning districts with differing allowed heights and FAR as indicated in the proposed zoning plan:

- Needham Center Overlay Sub-District A
- Needham Center Overlay Sub-District B
- Garden Street Overlay District
- Lower Chestnut Street Overlay District

Property owners can still develop their properties as allowed under the existing zoning regulations. However, in order to qualify for the higher development limits, projects would have to meet additional requirements that would benefit Needham Center. Increased height limits of 2+1 stories, or 3+1 stories where indicated in the plan, allow for an additional story, either under a pitched roof or set back from the building face.

The existing Medical Overlay District is unchanged. Highland Avenue Business District has the same 3-story/40 FT height limit, but a FAR limit of 1.0 has been added.



ZONING MAP LEGEND

2 1/2 Stories

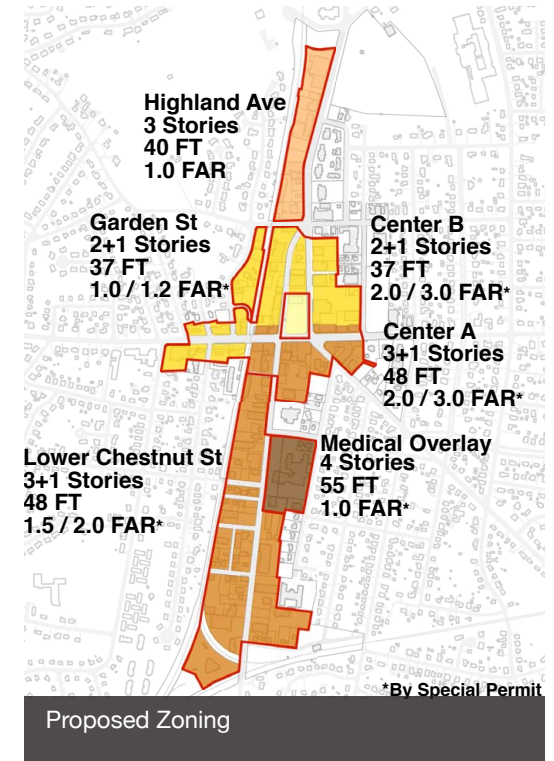
2+1 Stories

3 Stories

3+1 Stories

4 Stories

Zoning District
Boundaries

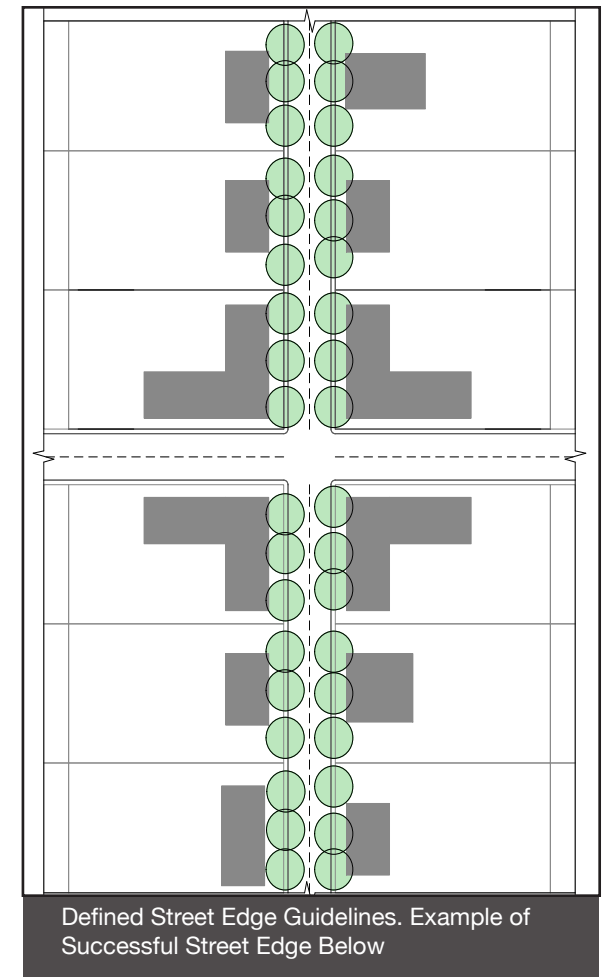
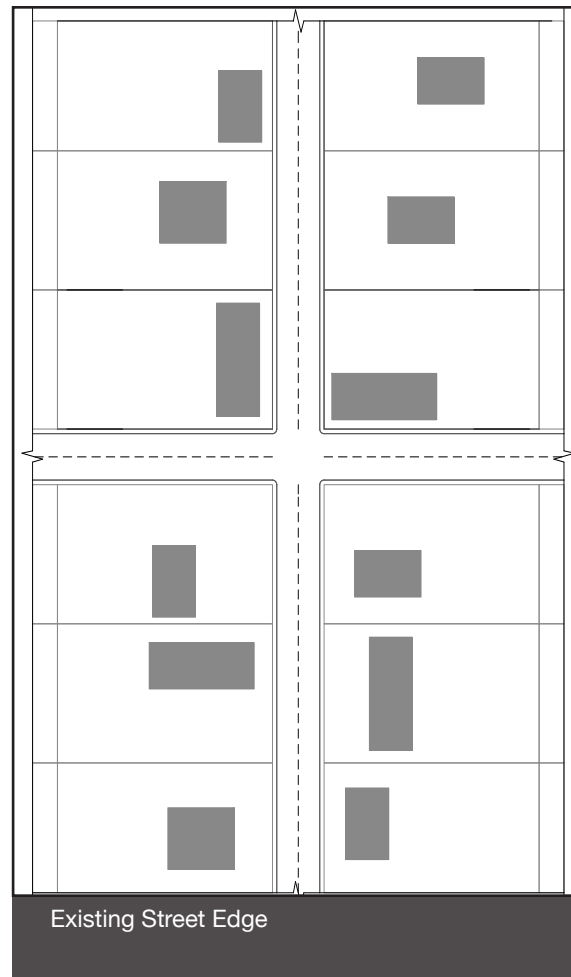


The Downtown Study Committee (DSC) spent a great deal of time discussing the appropriate height for buildings that front the Town Common on Chapel Street and Highland Avenue. The issue was whether four story buildings immediately adjoining Town Hall would overwhelm its height, scale and civic dominance.

After extensive consideration of these planning and design concerns, the DSC voted to endorse the recommended plan for a 2+1 story height adjoining Town Hall and a 3+1 story height at Great Plain Avenue and Lower Chestnut Street.

Street Edge

The street edge diagrams to the right show the impact on urban form of the existing massing compared to the proposed massing. The existing, scattered placement of buildings, often with parking in front, makes for unfocused and poorly defined spaces. The Development Plan seeks to correct this condition with consistent setbacks and better definition of street edge. This approach to massing serves to create a framework for village spaces with an opportunity for streetscape improvements that encourage vibrant and pedestrian friendly environments. The photograph to the right is an example of a successful application of this approach to street edge.





Proposed Street Frontage



Proposed Commercial



Proposed Residential

Development Potential

Redevelopment can be broadly defined as physical changes to existing buildings or building patterns, including new construction, rehabilitation, and facade improvements. Successful redevelopment can extend the downtown onto underutilized sites.

Retail

The Development Plan supports the existing uses of retail stores, services and office space throughout the Study Area. The most appropriate retail is “main street” specialty-type retail rather than “big box”-style stores.

Office

Although there continues to be a variety of office users, the concept plan recognizes a particular niche of medically related office space, whose development will be driven by the current and future demands from Beth Israel Deaconess Hospital-Needham and ancillary activities. This is especially evident on Chestnut Street with emerging medical office space, plus other supplementary medical uses scattered throughout the downtown.

Residential

Residential redevelopment options include the preservation of existing housing stock, development of context-sensitive new housing and the conversion of some former commercial or institutional uses to residential. It is important to expand downtown housing choices to establish a stronger customer base for downtown businesses and enhance the character of the downtown as a 24-hour activity center. Continuing to provide opportunities for affordable housing is also identified in the Development Plan.



Proposed Mixed Use



Proposed Parking Improvements



Proposed Streetscape Improvements

Mixed-Use

Diversity and character can be achieved with a mix of uses both vertically (residential over commercial) and horizontally (residential next to commercial) within the Study Area. Mixed land uses are critical to achieving a village-like setting, and add variety and vitality to commercial centers, neighborhoods, and streets. The addition of residential over commercial provides “eyes on the streets” and plazas at night creating safe spaces. A vertical and horizontal mix of uses in the Study Area will help achieve the vision for a dynamic center. The Development Plan proposes new commercial development (retail and office), residential development, visitor services, and civic uses.

Parking Consolidation & Improvements

There are many locations throughout the Study Area where there is the opportunity to consolidate parking and/or provide better management of existing parking. Frequently, there is adequate parking but not where it is needed. Consideration of a parking fund to help provide better parking management or help finance a parking structure is part of this comprehensive approach.

Streetscape Improvements

To make Downtown Needham more walkable, locations have been identified where sidewalks can be widened and where pedestrian links should be established and/or enhanced. Specific guidelines for streetscape identify minimum sidewalk widths, areas for sitting or outdoor dining, landscaping standards, uniform signage, pedestrian scale, and attractive lighting.

Development Potential By District

The following discussion includes some of the highlights of potential development in the three districts that comprise the Study Area.

Center Business District

Setbacks

The proposed Walgreens parking lot is an opportunity for a public/private redevelopment partnership to improve parking and create east/west pedestrian connections.

The pedestrian connection to Chestnut Street from the Chestnut Street Parking Lot is a successful public/private project that has improved walkability and linkages in the downtown.

Center Station provides the opportunity for mixed-use, transit-oriented development that takes advantage of convenient access to Boston. The recently completed mixed-use project, across Great Plain Avenue from the station, includes residential, retail and office use and is an example of the type of project the Development Plan encourages.

The Development Plan proposes an east-west pedestrian link from Center Station to Greene's Field including crosswalks on Chapel Street and Highland Avenue.

Street Edge

The proposed maximum height as shown in the cross-section to the right demonstrates a street edge



Historic Town Common



Historic Great Plain Avenue



Existing and Proposed Town Common Building Height

surrounding Town Common that is measured vertically by the cornice height of Town Hall.

Buildings in the circa 1900 Needham village center were similar if not higher than the recommendations for “2+1” story buildings with the third floor under an architectural, pitched roof.

Density

The proposed massing enhances the Town Common as an urban space that is the focus and a key part of the identity of Downtown Needham.

Height

The proposed zoning regulations of the Development Plan increase allowed heights in the Center Business District to 2+1 stories and in certain parts, 3+1 stories. The top floor is allowed if it is either under a pitched roof or set back.

Chestnut Street Business District

Setbacks

This district has two separate areas with different characteristics: Lower Chestnut Street and Garden Street. In the Lower Chestnut Street Business District existing setbacks from adjacent residential districts are maintained. In the Garden Street District a lower density is proposed than on Lower Chestnut Street in response to the existence of the adjacent residential district to the west. No changes are proposed to the existing zoning for the Medical Overlay District (MOD), which overlaps the Lower Chestnut Street Business District. Significant development in



Proposed Mixed-Use Development Along Chestnut Street

the MOD is anticipated in the planned, two phase expansion of the hospital. This development will have an impact on development throughout the Lower Chestnut Street Business District.

Street Edge

The existing poorly defined urban space along Chestnut Street is contrasted with what is identified in the proposed design guidelines that encourages a well defined urban space with public improvements to the streetscape on Chestnut Street.

Density

Compared to the existing development which is scattered, the proposed zoning will encourage new development to bring buildings to the street front, with higher density and massing that better define

the urban space, along with public improvements to the streetscape to make a more vibrant, walkable corridor.

Height

The proposed zoning regulations increase allowed heights in the Lower Chestnut Street Business District. The two separate areas that comprise the Chestnut Street Business District, Lower Chestnut Street and Garden Street, have different proposed maximum heights because of the different nature of these two areas. At Lower Chestnut Street, there is an allowance for 3+1 stories (A fourth story is allowed if under a pitched roof or set back from the building face.) The Garden Street Overlay District limits increases to 2+1 stories from the existing 2 1/2 stories.

Highland Avenue Business District

Setbacks

The focus of this district is the development of Highland Avenue as a boulevard leading into downtown. The Development Plan proposes to enhance Highland Avenue through the coordination of the planned improvements to Memorial Park with streetscape improvements to Highland Avenue. A design rendering to the right suggests how the retaining walls planned as part of the Memorial Park project complement the desired boulevard qualities of Highland Avenue.



Proposed Streetscape

Street Edge

In addition to streetscape improvements to complement the Memorial Park renovations, the plan identifies other streetscape improvements along the entire length of Highland Avenue, such as crosswalk locations, curb cuts, screening from parking lots and expanded sidewalks.

Density

An FAR of 1.0 is proposed to be added to the zoning regulations for this district.

Height

Maximum heights in the Highland Avenue Business District are proposed to remain the same.

District	Existing (SF)	Existing + 100% Effective Build-Out (SF)	Existing + 30% Effective Build-Out (SF)
Highland Avenue Business District	117,009	145,646	125,600
Center Business District	568,324	782,324	632,524
Chestnut Street Business District	556,147	1,003,983	690,498
TOTAL	1,241,480	1,931,953	1,448,622

* 100% Effective Build-Out

1. Includes parcels with > 15,000 SF of land area

2. Includes only those parcels with ≥ 50% expansion potential

Build-out Under Proposed Zoning

A probable (30 percent) build-out under the proposed zoning shows the likely impact over the next twenty years, as summarized in the table above. This projection takes into account a detailed market analysis for retail, office and residential space and the potential redevelopment of existing properties.

A traffic analysis performed on the impact of this build-out is shown in the chart to the upper right. The Level of Service (LOS) at each intersection for existing conditions and various scenarios of development are compared, with A being the best and F the worst. The summary chart at the bottom right includes the corresponding wait times for the projected LOS at key intersections in the Study Area with the projected 30 percent build-out, with and without upgraded signals.

With a 30 percent projected build-out and traffic signal improvements, the chart to the upper right shows the LOS will be better than the current existing conditions at five locations and will be equal to current existing conditions at the sixth location.



Peak Traffic Operations at Signalized Intersections. Summary at Key Intersections Below.

Intersection	30% Build-Out 2027		30% Build-Out 2027 With Traffic Response System Improvement	
	Level of Service	Delays (Seconds)	Level of Service	Delays (Seconds)
May St / Highland Avenue	E	58.5	D	52.7
Dedham Ave / Highland Ave / Great Plain Ave	D	36.8	C	34.2
Chapel St / Great Plain Ave	D	53.1	D	43.8
School St / Chestnut St	C	25.5	C	21.9



Secondary Street Route Network

Secondary Street Routes

Beyond improvements to traffic flow in the downtown area itself, the Town has designated a network of surrounding roads as throughways with the potential of diverting some traffic through downtown to these secondary street routes as shown in the map to the left.

Traffic Demand Management

Traffic demand management (TDM) is a general term for strategies that result in more efficient use of transportation resources. Strategies include:

- Alternative work schedules for area businesses.
- Subsidized monthly transit .
- Expanded bus transit and shuttle services.
- Strategies for improving bicycle facilities.
- Ridesharing and guaranteed-ride-home at area businesses.
- Improved sidewalks and footpaths for safe pedestrian access.

Traffic Monitoring Program

We suggest the Town implement an annual traffic monitoring program utilizing the upgraded traffic signal system to monitor overall traffic conditions at critical traffic congestion locations. The monitoring program should include traffic counts at all the critical locations. The traffic monitoring program should also include progress updates of the upgraded signal system, secondary street routes and the overall TDM Program.

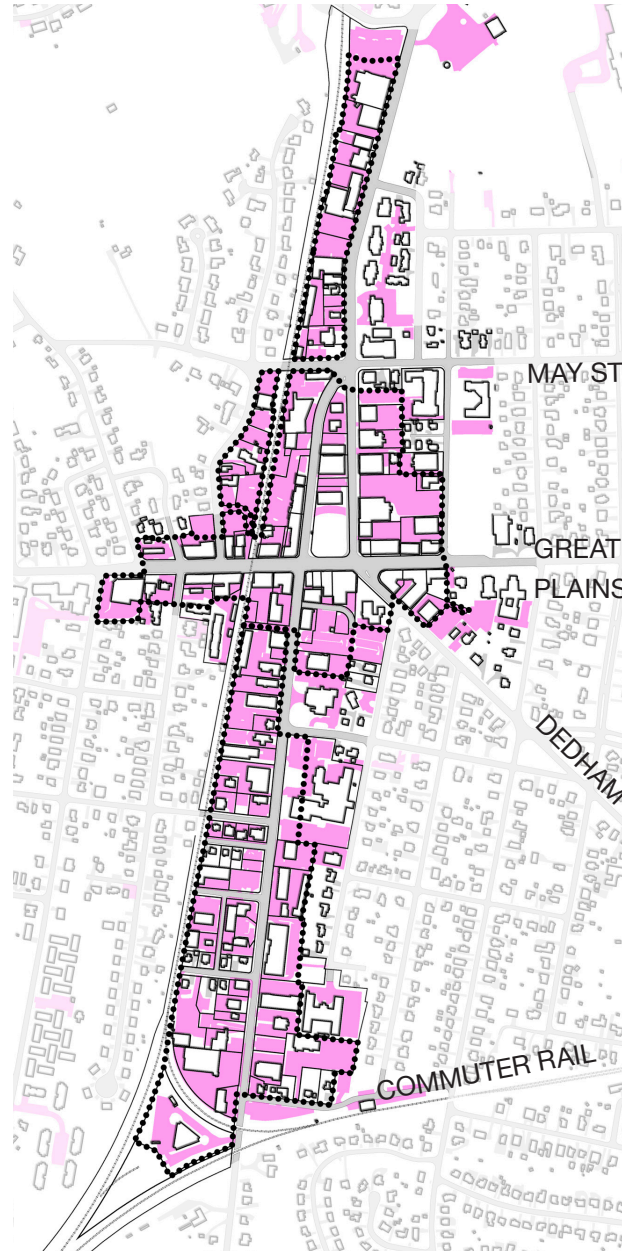
The Development Plan includes a multi-pronged, comprehensive and balanced approach to accommodating parking for both existing uses and new development. Successful vibrant town centers require convenient parking provided in a way that complements the desired form of a mixed-use, walkable town center.

Consolidation of Off-Street Parking & Additional On-Street Parking

Previous studies have shown that there is a disproportionate amount of land currently used for off-street parking. As documented in the map to the right, there is clearly an overabundance of land dedicated to off-street parking in Needham Center. Also, the placement of parking between the street and building, and the excessive number of curb cuts have degraded the village aesthetic and pedestrian environment.

The Development Plan includes overall recommendations for consolidating off-street parking, reducing curb cuts and encouraging the location of parking behind buildings. These recommendations range from small adjustments affecting a few parking spaces to public/private partnerships on projects similar in size to the successful Chestnut Street parking lot.

Where possible there are recommendations for additional on-street parking along Chestnut Street.



EXISTING OFF-STREET PARKING

- OFF-STREET PARKING
- LIMIT OF STUDY AREA



Source of Data: Town of Needham, MassGIS

Reduction in Parking Requirements & Increased Flexibility

Existing parking requirements are based on generic standards that use peak demand for parking at single use developments in relatively low-density settings with little transit. These standards don't apply in a compact, mixed-use walkable village center. The zoning recommendations therefore include a modest reduction in parking requirements, where appropriate, for mixed-use development projects, and provide more flexibility through the payment of in-lieu parking space fees as an alternative to providing all the spaces required. The in-lieu parking fees would go into the parking fund. This flexibility would encourage desirable mixed-use development by helping to make development decisions fair, predictable and cost effective.

Parking Fund

Proceeds from the in-lieu parking space fees can be used for a range of projects that provide additional parking spaces or reduce the demand for additional spaces. Such potential projects include:

- Parking management programs
- Transportation demand management (TDM) programs
- Public parking lots and/or parking structures

Parking Management Programs

There are a range of parking management programs that can more efficiently utilize the existing parking spaces. These include:

- Use of remote lots for employees with provisions of a shuttle service.
- Parking pricing strategies to better balance parking supply and demand .
- More efficient use of parking through better motorist information, signage and enforcement.
- Relocation of commuter parking from Center Station to Hersey.

Transportation Demand Management Programs

Transportation demand management programs discussed above to reduce car trips into the town center have the added benefit of reducing parking requirements.

Parking Structure

Proceeds from the parking fund can be used for the construction of a parking structure. A centralized structure can help meet redevelopment goals by the elimination of small surface parking lots and curb cuts that degrade the walkability of the town center.

The proposed zoning has addressed the development of a parking structure by allowing this use under a special permit. In addition the proposed zoning now excludes the area used for underground parking from the maximum FAR requirement in the Needham Center and Lower Chestnut Street Overlay Districts.

Design Guidelines

Traffic, Parking & Pedestrian Improvements

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Purpose

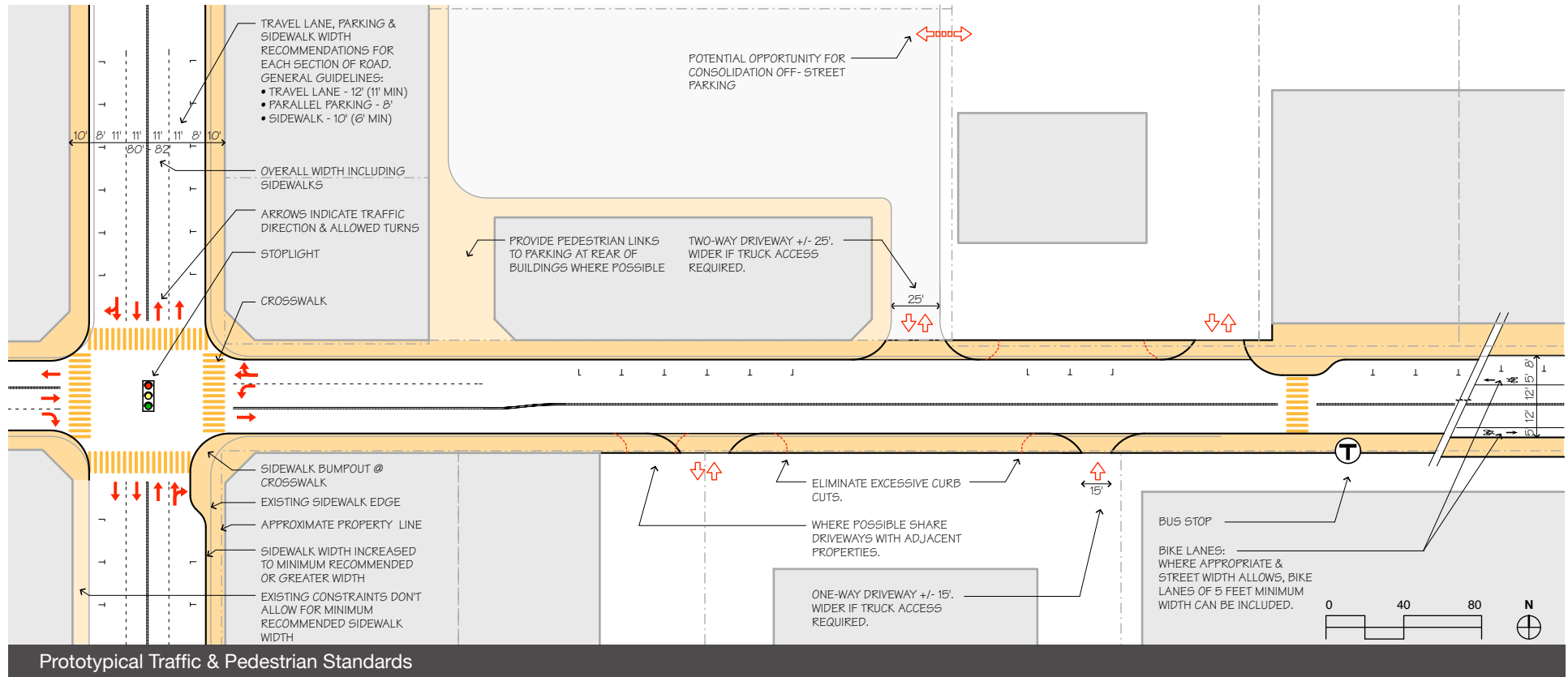
The Design Guidelines have been developed to encourage good design that will contribute to a safe, attractive and vibrant town center. The guidelines are intended to provide direction to businesses, property owners, developers and town departments involved in public and private development and improvement projects in the town center.

The guidelines also serve as a reference for the planning board and other town departments involved in the review process of projects in the town center and are integral with the creation of the four overlay districts in the two existing zoning districts:

- Needham Center Business District
- Chestnut Street Business District

The guidelines provide a clear and consistent standard so that project applicants will understand the Town's design goals and thus facilitate a smoother, more efficient review process.

These guidelines build upon the 1995 *Design Guidelines for the Business Districts* and are the result of a working partnership between the town government, the Needham business community and residents. The guidelines have been developed through an open and inclusive process of public discussion, workshops and review that has benefitted from a broad range of individuals and groups within the Town.



The design guidelines include recommendations for improvements to roads, parking, sidewalks and pedestrian links. These recommendations are documented in a plan of the Study Area. This plan is meant to serve as a master plan for coordinating traffic and pedestrian improvements. This plan is not a final design. No changes will be made without consulting property owners. These recommendations will be referred to when proposed projects are reviewed by the Town.

The objectives of these recommendations are:

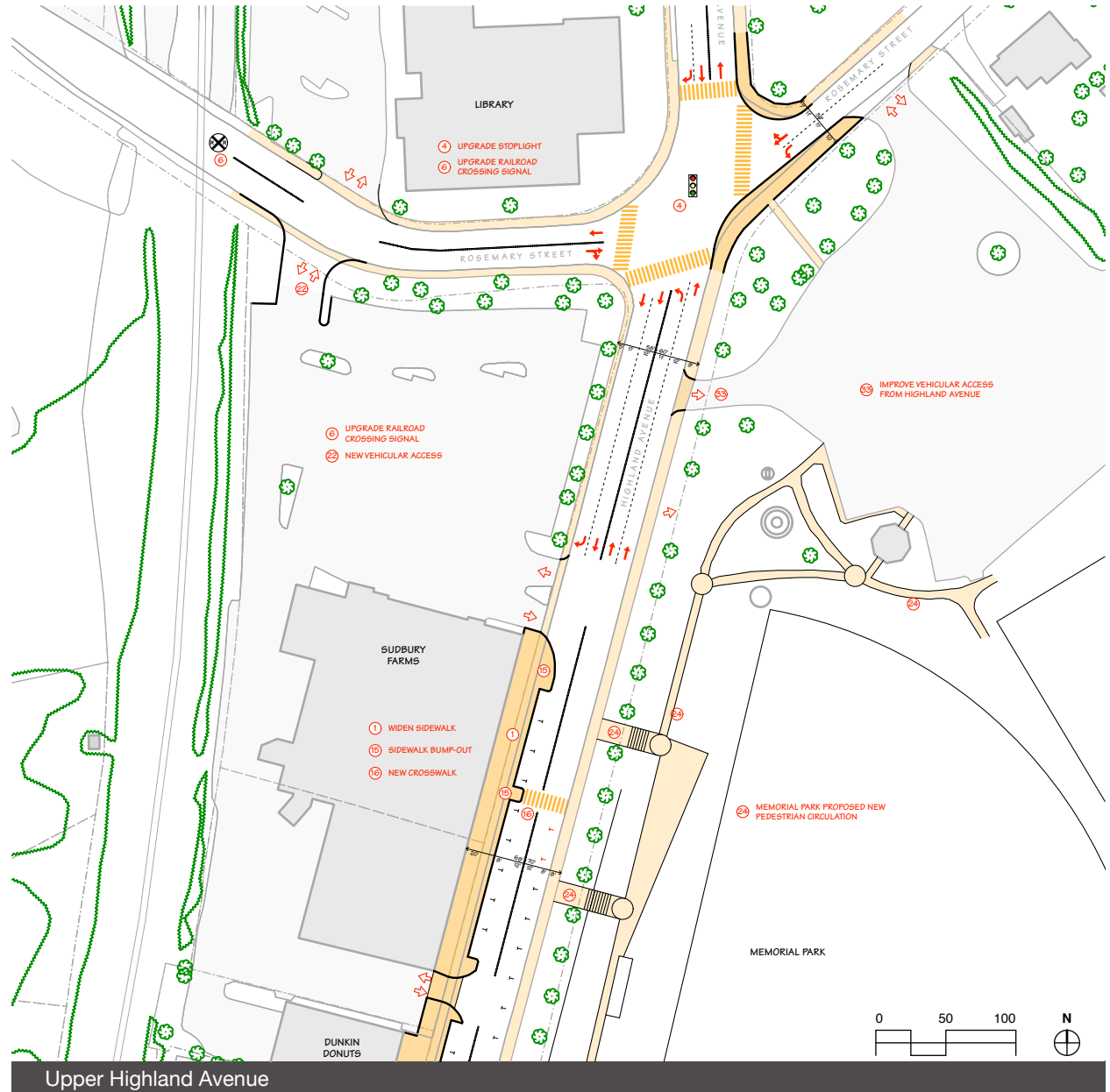
- Improvements for increased traffic and pedestrian safety.
- Better traffic flow by optimizing lane layouts and traffic signal upgrades.
- Consolidation of off-street parking.
- Improvements to pedestrian circulation in concert with streetscape and urban form recommendations discussed above.

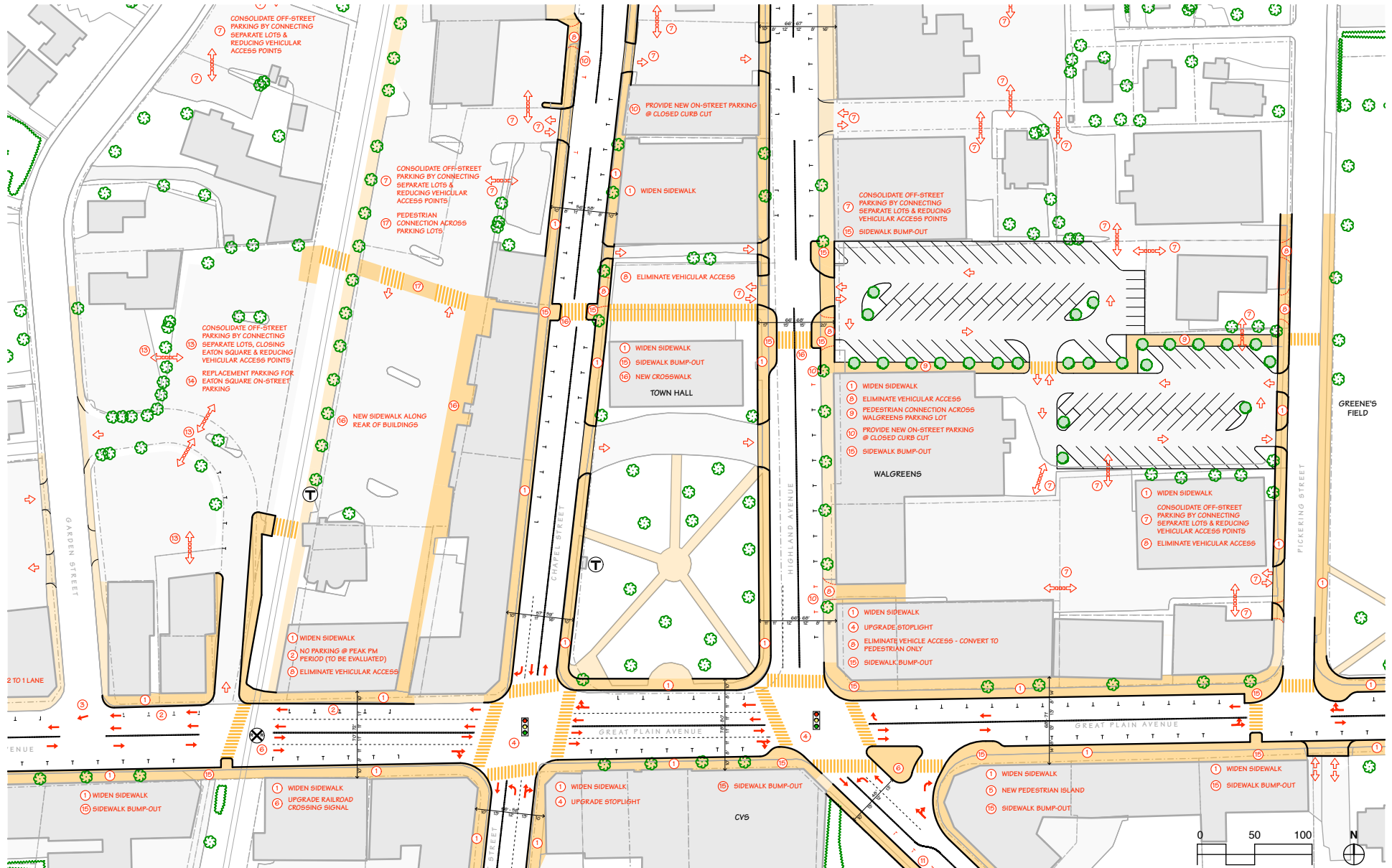
Layout and dimensional standards are documented in the prototypical plan above. This plan serves as a legend to explain the recommendations in the plan of the Study Area as discussed below. The illustrations show recommendations for crosswalks, sidewalk bumpouts, traffic signal upgrades, etc. The plan above also provides dimensional standards for traffic lanes, bike lanes, sidewalks and curb cuts for driveways.

A plan with recommendations for the entire Study Area at a larger scale is available for review at the planning department. An excerpt of the plan for each district is included on the following pages.

Highland Avenue Business District

The plan to the right shows the northern most portion of the Highland Avenue Business District. Included in the plan are improvements currently under construction at Memorial Park. Traffic safety can be increased here by the addition of a second vehicular access to the Sudbury Farms parking lot off of Rosemary Street. Pedestrian safety can be improved with the addition of crosswalks from Memorial Park across Highland Avenue to retail businesses along the western side. One crosswalk is shown in the plan to the right and a second one is at the southern corner of Memorial Park.





Needham Center at Town Common / Town Hall

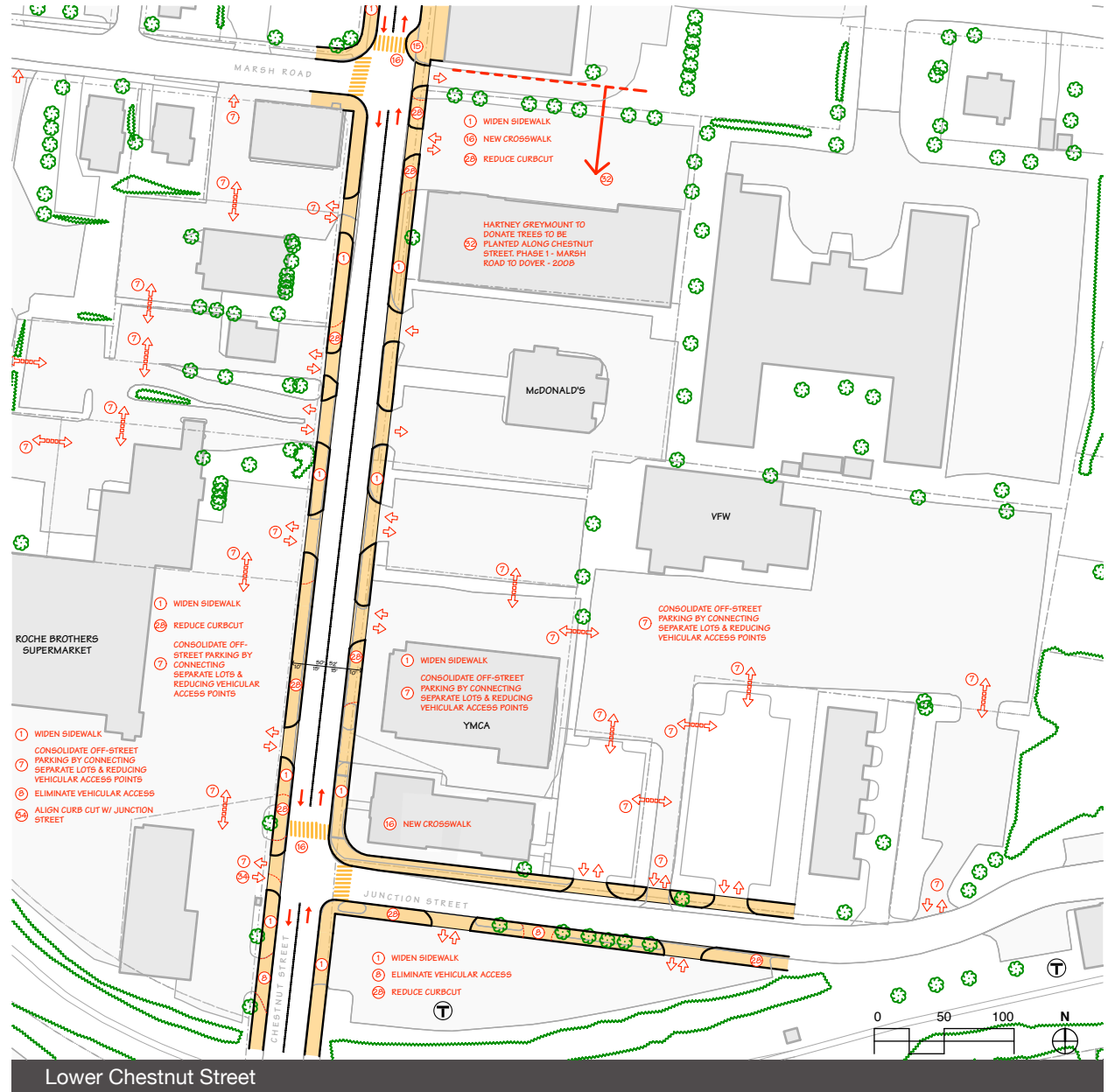
Center Business District

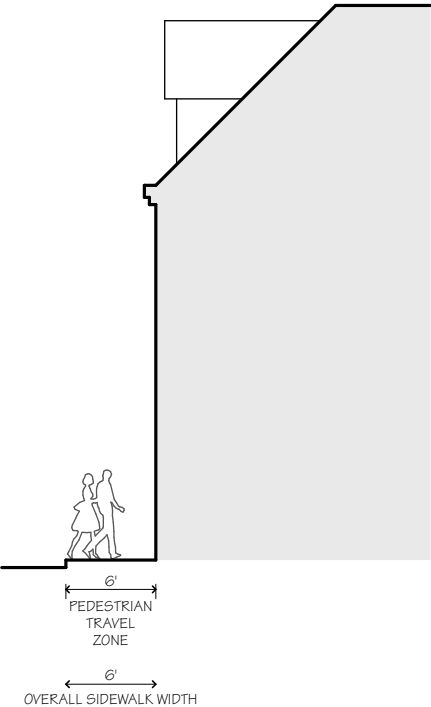
The excerpt from the plan on page 56 is centered on Town Common and Town Hall. Traffic flow improvements include recommendations for upgraded signals and new traffic lane layouts along Great Plain Avenue, Dedham Avenue, Chapel Street and Chestnut Street. Increased pedestrian safety is provided by improved existing pedestrian crossings and the addition of new mid-block crosswalks.

Review of the existing conditions has shown that many of the sidewalks in this area have the opportunity to be increased in width to at least the minimum recommended 10 feet. The development of a pedestrian link from Needham Station to Greene's Field is also encouraged as shown in the plan. Finally there are many opportunities for consolidation of off-street parking as shown.

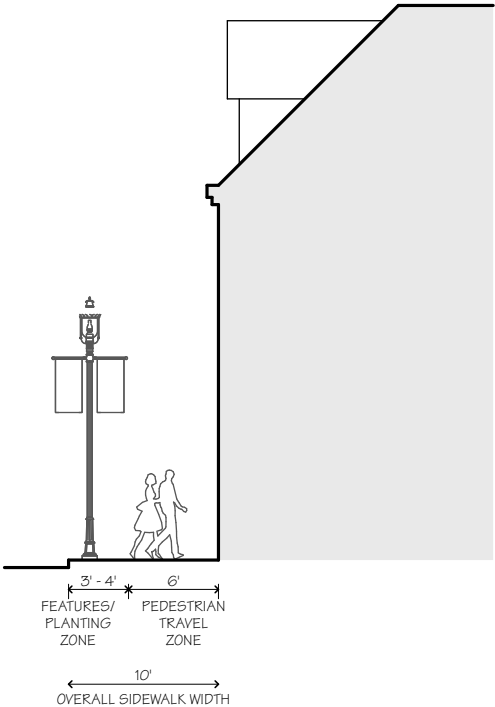
Chestnut Street Business District

The excerpt to the right shows the lower portion of Chestnut Street. The plan incorporates the proposed hospital expansion project to the north and the Chestnut Street reconstruction and tree planting project from Marsh Road to the south. There is a significant opportunity to consolidate curb cuts and to consolidate off-street parking along Chestnut Street.

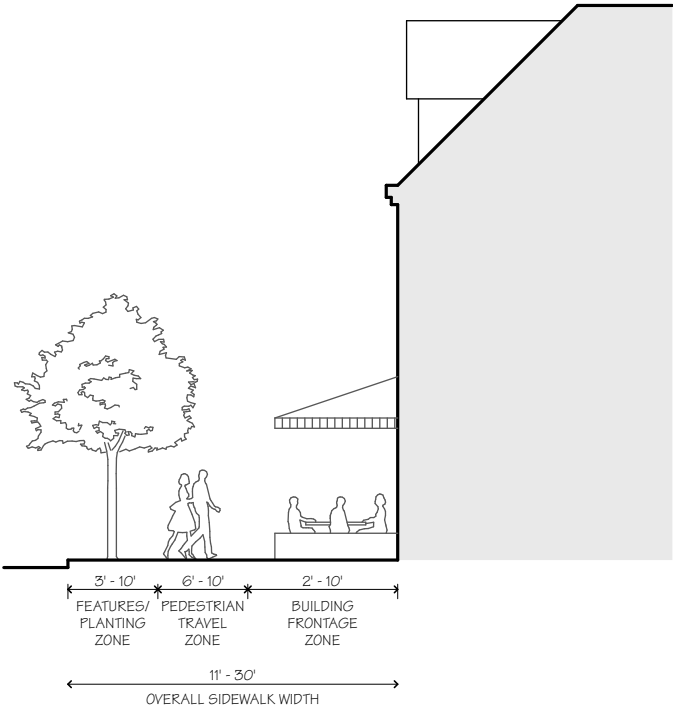




Minimum Width
Where Constrained by Existing Conditions



Minimum Recommended Width



Preferred Width

Sidewalk Design Standards

Sidewalks are an important element in attaining a pedestrian-focused and enjoyable streetscape. Wider sidewalks are essential for a thriving village environment and the increased area encourages foot traffic. The wider sidewalks will also provide sufficient room for businesses to offer outdoor seating and displays conducted in accordance with town requirements. The wider sidewalks also provide additional room to move existing obstructions, like streetlights, sign poles and sidewalk signs, out of the path of travel for pedestrians.

Pedestrian crossings and bicycle access are important components of achieving a pedestrian focused streetscape environment. Safe and comfortable street crossings promote foot traffic and discourage unsafe and illegal street crossings in mid-block areas.



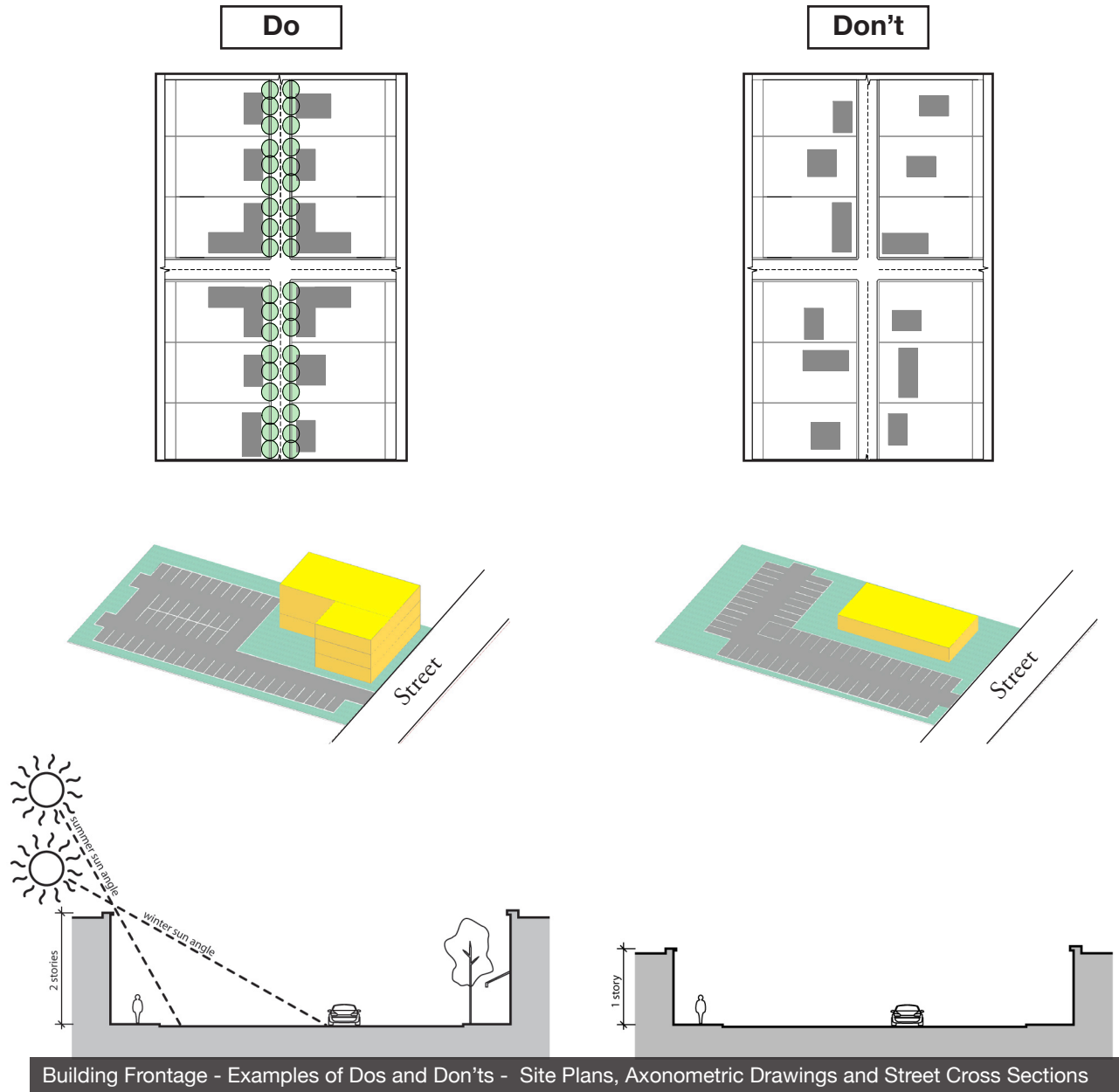
Photographs of Successful Streetscapes

Building Frontage

The existing, scattered placement of buildings, often with parking in front, makes for an unfocused, poorly defined street space. Massing is encouraged that brings the building to the street edge. This approach to massing serves to create a framework for village spaces with an opportunity for streetscape improvements that encourage vibrant and pedestrian-friendly environments.

Massing is encouraged that better defines and improve the village spaces of downtown along major streets. Parking should be located behind buildings and not on street frontage.

Multi-story massing along the street edge also helps to define the street space and is preferred over one-story massing.

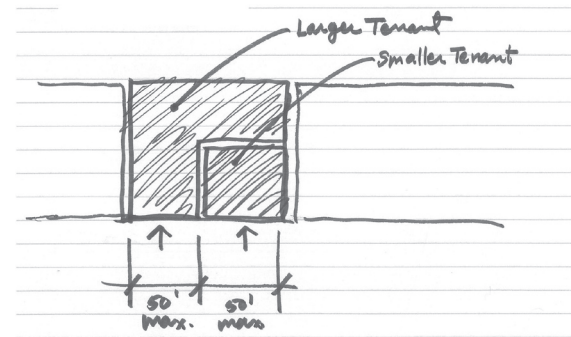
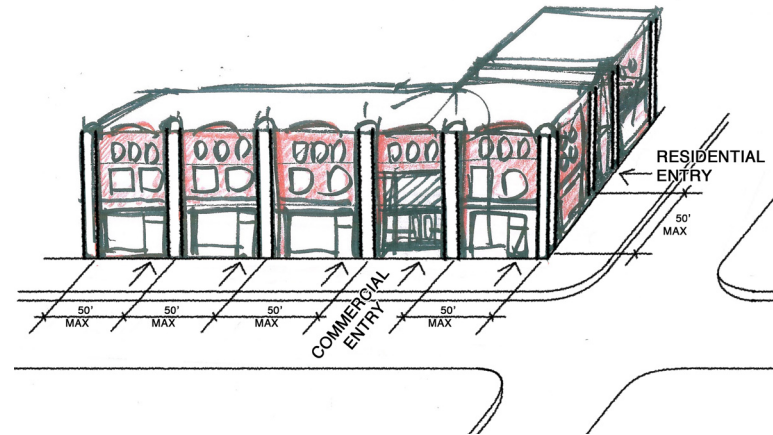


Building Frontage - Examples of Dos and Don'ts - Site Plans, Axonometric Drawings and Street Cross Sections

Maximum Ground Level Frontage Requirement

To encourage more diversity within commercial areas, a single business should not occupy more than 50 feet of continuous ground level frontage along major streets. Residential entries to ground floor dwelling units are to be located on the side and/or rear of buildings. An entrance to a lobby for upper floor dwelling units and other uses can face the street front.

Larger tenants can be accommodated on the ground level, extending behind a smaller tenant as shown in the plan to the right. Alternatively, a larger tenant can also extend up to the second floor.



Ground Level Frontage Requirement Illustrations - Axonometric Drawing & Plan

Vehicular Access

Vehicular access should be located and designed with the goal of promoting walkability and pedestrian safety. Curb cuts should be avoided or minimized on major street frontage to the fullest extent possible. Where feasible, use a separate entrance and exit that are spaced well apart or separated by a landscaped island. Creative solutions are encouraged, working in partnership with other adjoining public and private property owners.

Refer to prototypical and pedestrian standards above for additional dimensional guidelines for curb cuts.

Do**Don't**

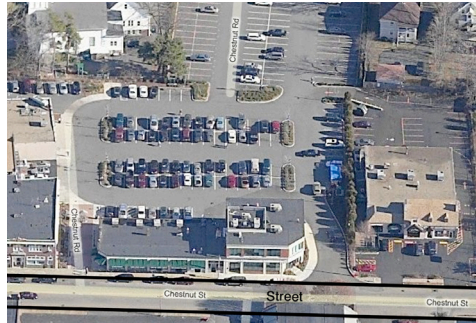
Vehicular Access - Examples of Dos and Don'ts - Rendering and Photograph

Parking

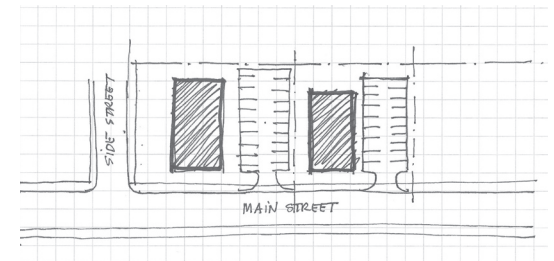
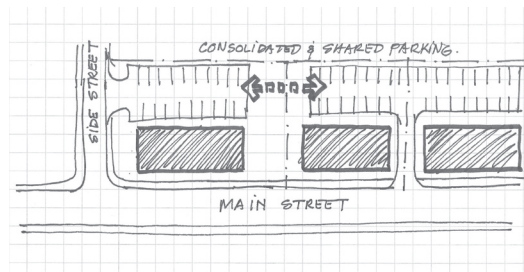
Parking areas should be located behind buildings where possible and their visibility minimized by appropriate landscaping. Where parking cannot be located behind buildings, screen the parking lot using fences, stone walls, plantings or earth berms. Screening should be at least 3 feet high. Landscaping beyond the requirements of the zoning bylaw is encouraged. It is recommended to use attractive landscaping, fences and walkways to dress up the parking area. The added height from planting trees in the setback between the parking lot and street creates a pedestrian scale which contributes to the goal of enhanced streetscape to make a more walkable town center.

Creative solutions are encouraged, working in partnership with other adjoining public and private property owners to share vehicular access to parking lots. One example of such an approach is the plan on the right, which shows three properties sharing parking, reducing the number of access points.

Do



Don't



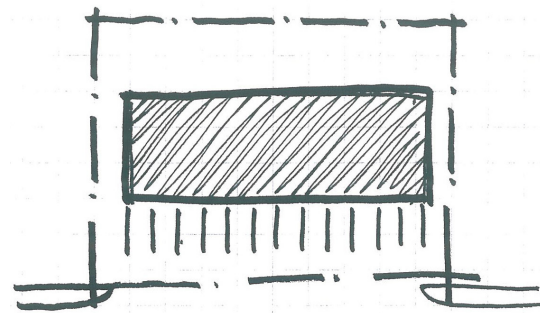
Parking - Examples of Dos and Don'ts - Aerial Photographs and Plans

Remediation of Front-In Parking

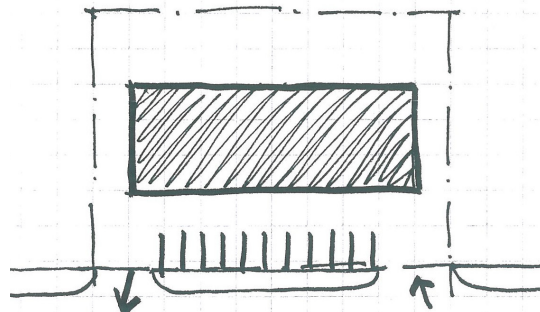
For those circumstances where an existing property with non-complying, front-in parking is being redeveloped, but not to the extent that the existing building will be torn down, the property owner is encouraged to remediate the negative impact of front-in parking. The examples to the right show a typical front-in parking condition and different options for improvements.

At its worst, front-in parking has completely eliminated a sidewalk, as shown. The minimum improvement is to add a sidewalk with separate entrance and exit vehicular access points, as shown in options A, B and C.

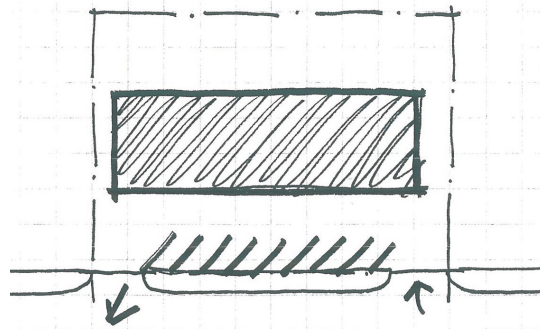
The final two examples take the advantage of opportunities to enhance the streetscape and contribute to the pedestrian environment. Option D adds a sidewalk that is offset in front of the building, which allows for on street parking and the opportunity for a generously widened sidewalk. The environment can be further improved with appropriate streetscape furniture and appropriate supporting activities for the ground level building use such as sidewalk sales and dining. Option E provides access to parking available behind the building and converts the parking area in front of the building to a small plaza, which, similar to Option D, can be designed to contribute to the streetscape.



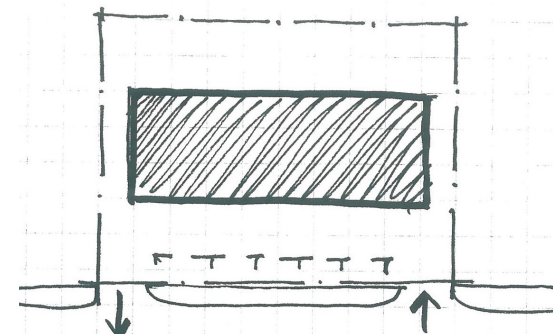
Existing Front-In Parking



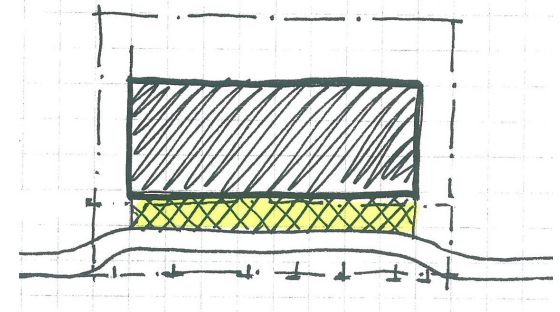
Option A



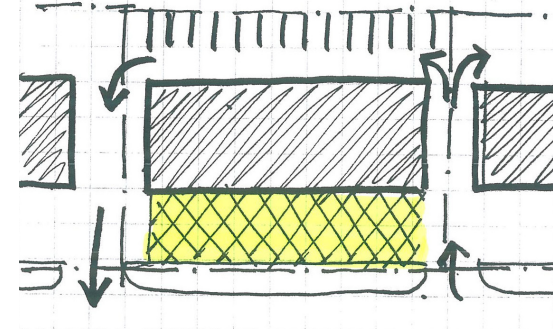
Option B



Option C



Option D

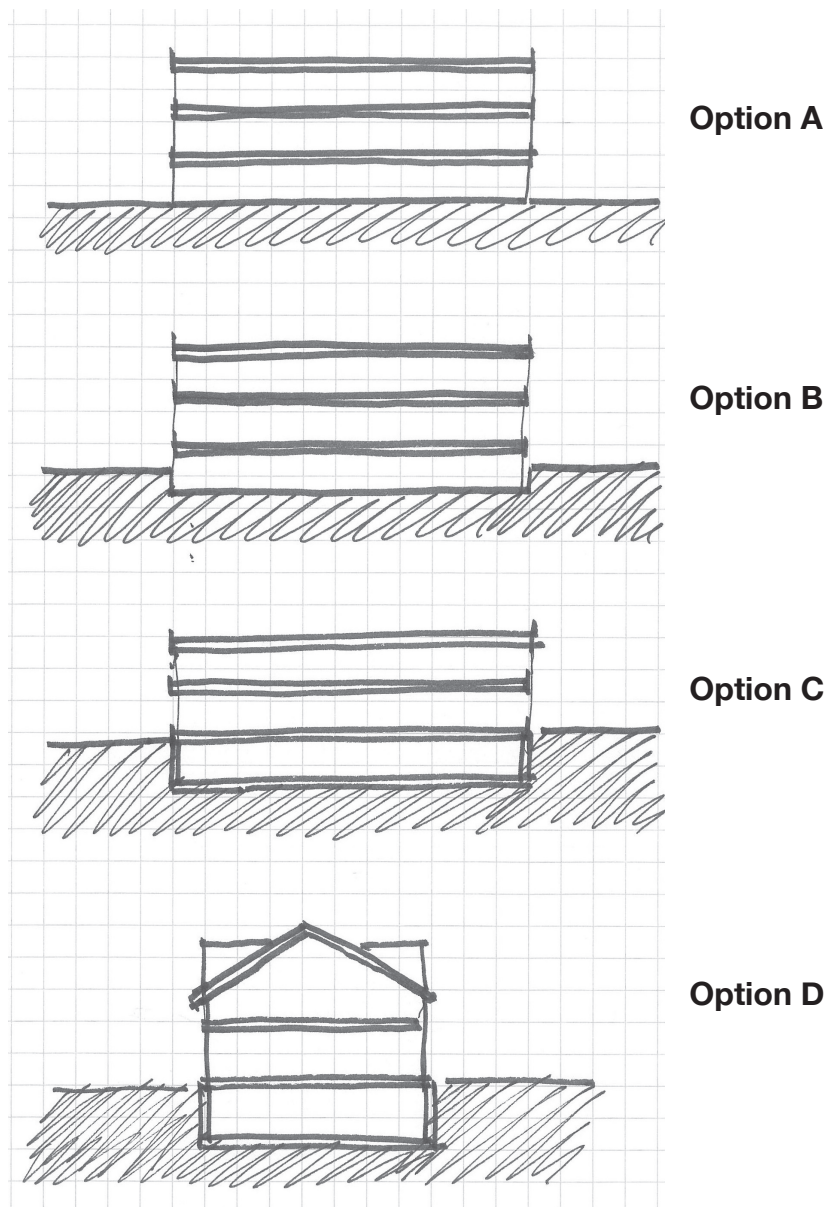


Option E

Remediation of Front-In Parking - Examples - Site Plans

Parking Structures

The building cross sections to the right show a range of approaches to designing a parking structure. Option A does the least to soften the imposing character. Option B lowers the first level of parking a half level below ground, thereby reducing the height and massing. Option C takes this one step further by completely submerging one level of parking below ground. The preferred option D goes one step further by further softening the parking structure with a gable roof to better blend it into desired village aesthetic.



Parking Structures - Examples - Building Cross Sections

Alley Ways & Pedestrian Links

These passages are recognized as valuable pedestrian routes to and from stores, parking and streetfronts. They also extend pedestrian networks to further the goal of a more walkable town center.

Public/private partnerships for the embellishment of these spaces are encouraged. Improvements include lighting, planting, wall surface treatments, landscaping and the addition of street furniture.



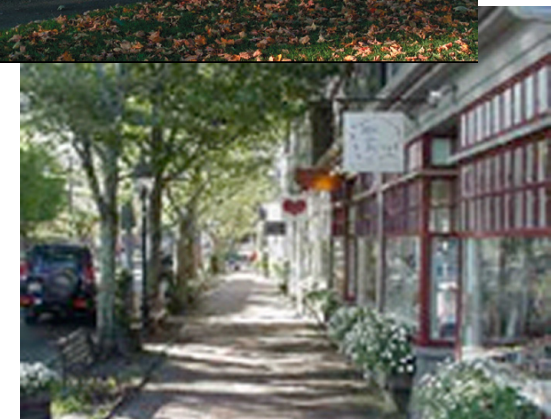
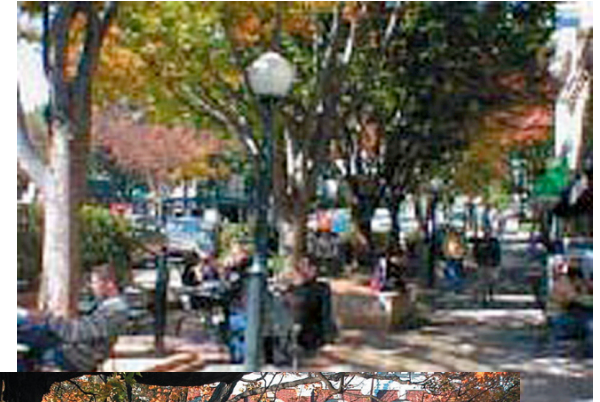
Alley Ways & Pedestrian Links - Examples of an Unimproved Alley and Improved Pedestrian Links

Landscape & Open Spaces

Trees and other plantings can expand the landscape character of Needham Center, especially on the Town Common. Existing landscaping should be preserved. Tree-lined streets help create a consistent streetscape and scale.

Landscaping will play a central role in defining the character of the proposed streetscape. Landscape elements will be incorporated into nearly all aspects of the streetscape design and include parkway trees, at-grade planting beds and raised planters in strategic locations. Moveable planters and hanging baskets may be incorporated on a more limited basis given their higher maintenance requirements.

Trees, planters and other streetscape landscaping can be a defining element and are an important part of the plan to develop a village environment.

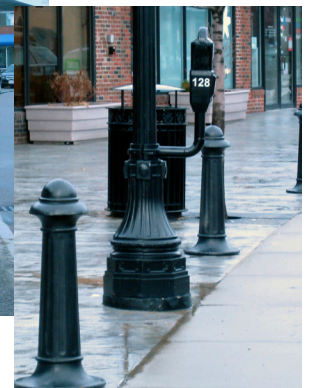


Landscape & Open Spaces - Examples of Successful Open Spaces in Needham (Center Right & Left) in Other Locations, and Rendering of Proposed Improvements along Highland Avenue at Memorial Field

Street Furniture

Varied street furniture (benches, trash receptacles, bicycle racks) must be carefully selected for function, size, appropriate use and especially location at sidewalks to enhance streetscape.

Street furniture and pedestrian amenities can give a detailed feel to the streetscape environment. When taken together, these elements establish the overall aesthetic appearance of the streetscape. A package of street furniture and amenities should be integrated into the streetscape design. Street furnishings, such as benches, receptacles, streetlights, bicycle racks, should be selected from the same family of products to provide a unified design element in the streetscape. Consideration should also be given to their long-term maintenance and how well they will hold up over time and survive exposure to the elements. Trash and recycling receptacles as well as newspaper racks may be incorporated into landscape areas or be provided for in a separate, aesthetically consistent enclosure to minimize obstructions and soften the visual impact of these accessory furnishings.

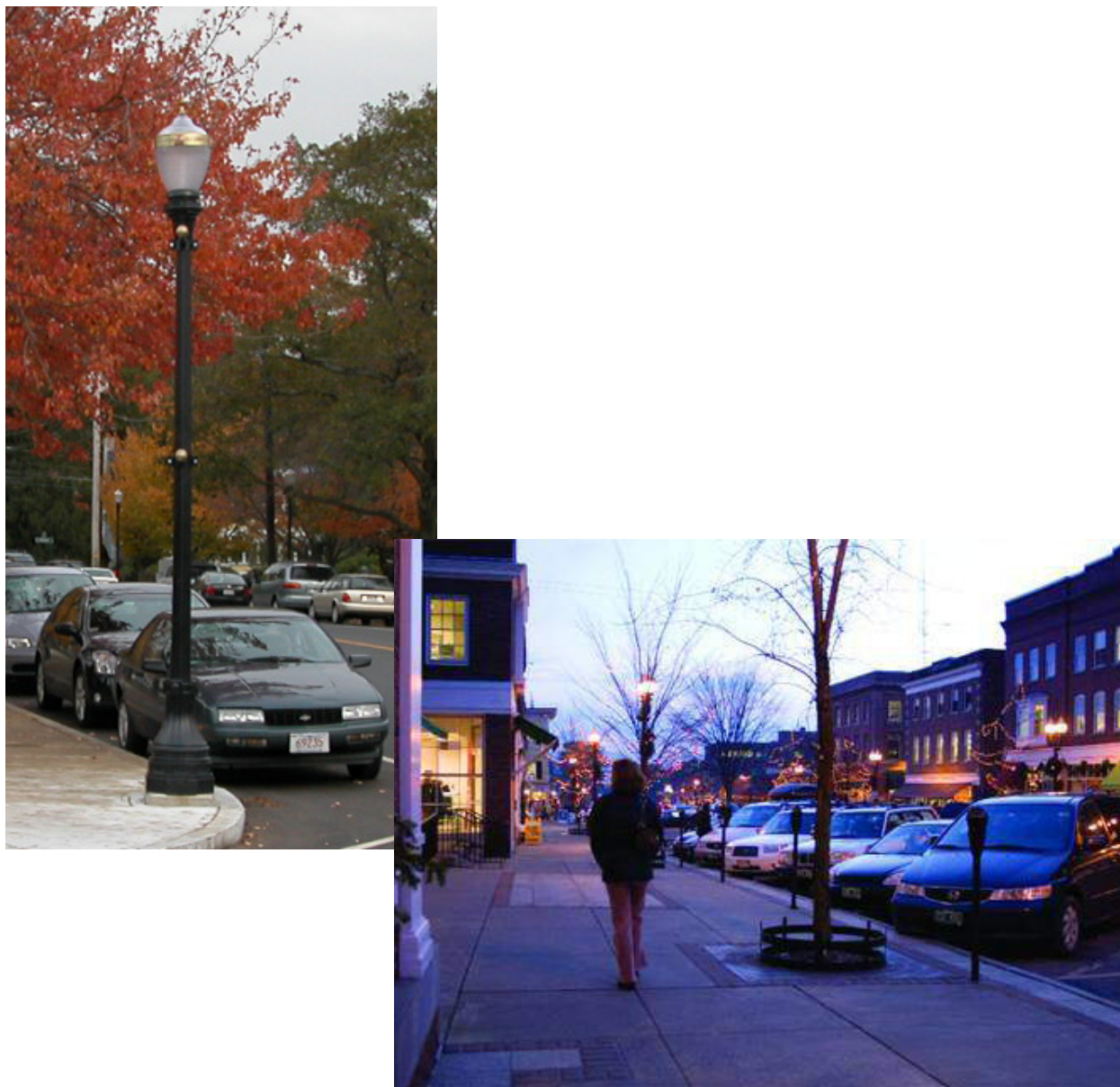


Street Furniture - Examples of Benches, Banners, Lightposts, Bicycle Racks and Trash Receptacles

Lighting

Lighting should be functional and appropriate for its intended purpose. Where possible, street lights should be at pedestrian scale for lighting sidewalks and major public streets. Storefront lighting should specifically highlight the main signage and the window display.

Maintaining an appropriate level of street lighting for safe and comfortable evening shopping is important when establishing a pedestrian-oriented environment. Light levels need to be bright enough to address concerns over safety and visibility but not so bright that the light is overwhelming and uncomfortable. Lighting must also provide adequate roadway illumination while also lighting pedestrian areas sufficiently. Intermediate light fixtures at lower heights than the existing streetlights could provide additional ambient lighting for pedestrians. Decorative street lights and poles are a prominent but costly component of a streetscape. Care should be taken in selecting a fixtures that have an appearance which is compatible with the overall aesthetic goals of the streetscape plan and that provide sufficient light levels. Light fixtures should incorporate the latest energy-efficient technology.



Lighting - Light Post Installed at Greene's Field. Example of the Vibrant Impact of Street Lighting.

Scale

Human-scaled outdoor spaces are one component of the village aesthetic. To create the sense of being within an outdoor room, it is important that the built environment does not lack human scaled elements, which would result in an environment that overwhelms the pedestrian.

The proportions and relationships between doors, windows and other building and site elements should relate to a human scale and be compatible with the scale, rhythm and character of those portions of the surrounding environment compatible with the village aesthetic. Bays, dormer windows and other projections are encouraged that relate to the scale and character of village architecture and reduce the overall mass and bulk of the building.



Examples of Architectural Details Providing Scale - Renderings & Photograph

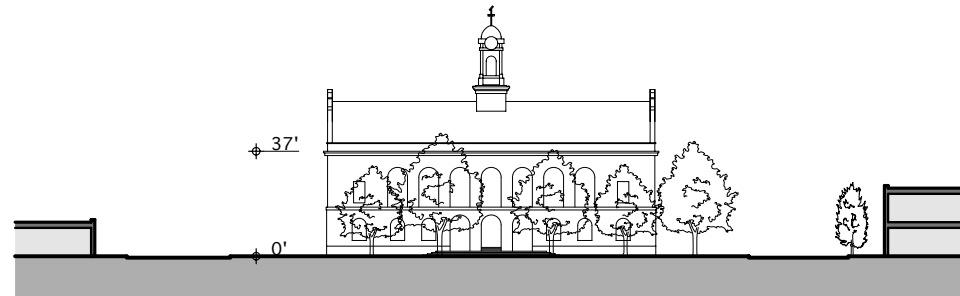
Building Height

Building heights of three and four stories are encouraged in the town center. Buildings should be at least two stories minimum to achieve a pleasing sense of enclosure along a walkable street.

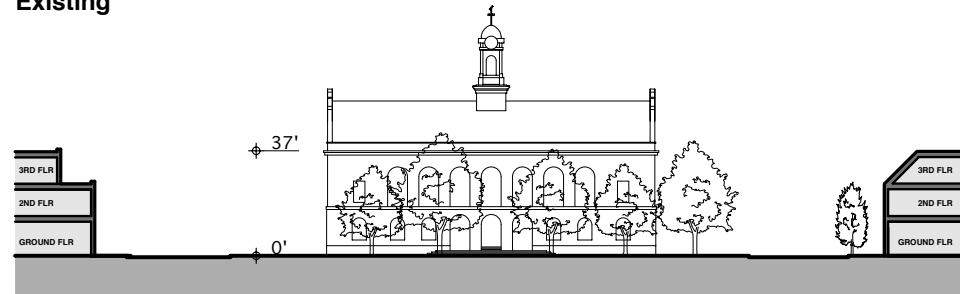
Slightly less than half of the commercial buildings in Downtown Needham are built to the current height limit of 2 1/2 stories (35 feet). Building heights up to 2+1 and 3+1 stories should be considered for new projects, as greater height can enliven and further define the public environment. Parts of Great Plain Avenue currently have little sense of enclosure, being flanked by low buildings on either side across a broad expanse of street.

Attention should also be paid to the tops of buildings. The proposed zoning regulations encourage a gabled roof or setback top story.

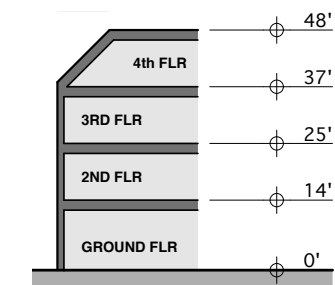
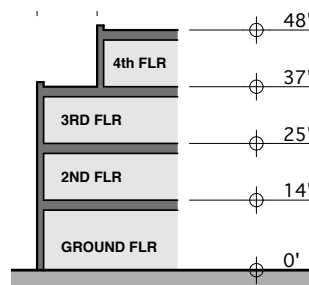
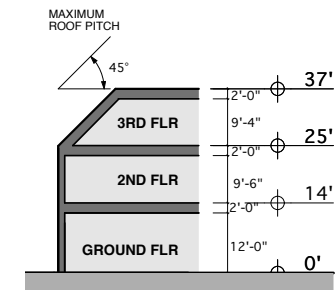
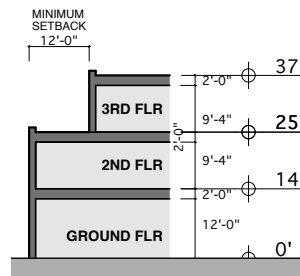
Increased building heights have been set differently in different zones to reflect the context of the district. The maximum height in the area surrounding Town Hall has been limited to three stories so that the surrounding buildings do not overwhelm the prominence of this civic focus of the center.



Existing



Proposed



Building Heights - Top - Existing and Proposed Height Limits Surrounding Town Hall.
Bottom - Prototypical 2 + 1 and 3 + 1 Maximum Height Limits

Materials & Colors

Use materials and colors that are compatible with the character of the building and Needham Center. Almost all buildings are either brick with stone trim; brick with wood trim, usually panelized; wood with wood trim; or brick and stucco.

New construction should in general conform to one of the types of construction described above and use trim details in a manner akin in spirit to those existing buildings in which the Town takes pride. Careful attention to small scale details is encouraged to add to the visual interest of the pedestrian level streetscape.

Good use of color takes cues from the architecture of the building. Limit the number of colors selected. Highlighting numerous details in different colors may look too busy. Major building elements, such as piers, columns and sign bands should be painted the same color throughout the building. It should be kept in mind that signage, when applied, will add yet another layer of visual complexity to the facade. Masonry has its own natural color and should rarely be painted, except under special circumstances.

Renovation and Restoration

Preserve and enhance facades with character-defining architectural features of high quality or historic importance. Do not cover distinct original features of a building and take steps to improve the rear of a building.



Materials & Colors - Existing Buildings in Needham Center

Facades, Windows & Doorways

Design should be compatible with buildings in office and residential areas. Building style should be in keeping with a predominantly residential New England community. Architectural cohesiveness must be encouraged to allow the character of Needham to develop consistently with the concept of village center. Building facades in Needham Center are often divided into smaller bays by a clear frame of vertical piers, which usually, but not always, reflect the location of structural columns or walls. The repetition of bay units of similar sizes helps to establish a common visual theme, scale, rhythm and texture among buildings of different eras. Buildings should be compatible in design with the composition of the Center's older commercial architecture; distinguish and coordinate the design of upper and first floors, and divide facades into smaller bays. Windows and other elements on the upper stories should be designed to relate to the design elements of the first floor.

Special Treatment of the First Floor

Encourage large display windows along the first floor to maintain strong visual connections between the interior and exterior. Include a zone for signs on buildings within which each storefront can have an individual identity.



Renderings Illustrating Guidelines for Facades, Windows and Doorways

Storefronts

Storefronts should be open and welcoming and help to establish an individual identity for the store. The storefront and the storefront frame are the key elements in the design of the first floor facade. The storefront offers an opportunity to establish the individuality and character of each business, drawing attention to a business and the goods or services it provides. The storefront frame is a common element among Needham Center's storefronts, providing a common theme which helps to establish a cohesive quality for the commercial area. By providing a clear separation between stores, the frame allows each store to establish its own special character and identity.

Outdoor Displays

Outdoor displays can contribute to creating an enticing storefront and enlivened streetscape. The storefront design should be strong on its own and not be dependent on the use of outdoor displays. Outdoor merchandising provides an opportunity for seasonal and special displays.

Use outdoor displays, planters and other outdoor elements to enhance the storefront and the streetscape. Displays should neither clutter the sidewalk nor obstruct pedestrian traffic.

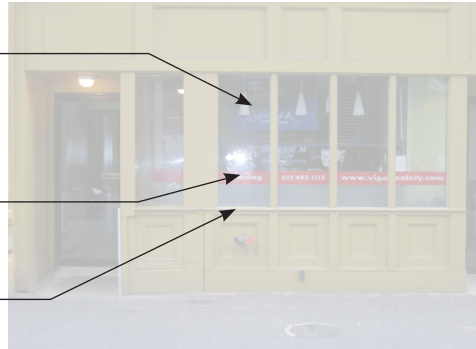


Storefronts - Rendering & Photographs of Existing Storefronts in Needham Center

Interior lighting does not work to make interior visible or inviting.

Signage identifying store is too small and should not be attached to window.

Window sill height too high.



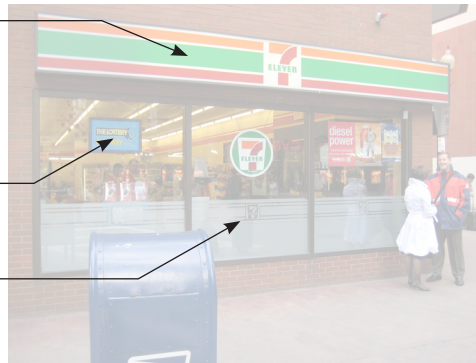
Unappealing Storefront



Although signage identifies store clearly, its style is not appropriate to the village aesthetic and should be reinterpreted to better relate.

Decals on windows block visibility into store.

Although window sill is adequately low, the lower half is opaque.



Minimally Improved Storefront



Lighting is designed to highlight window displays and reinforces an overall transparency, inviting the pedestrian's eyes to explore the interior.

Signage helps to establish the identity of the store.

Large transparent glass display windows provide ideal display opportunities. Merchandise displays are designed with creative themes to catch the attention of the passers-by.



Storefront Examples

Attractive Inviting Storefront



Awnings

Awnings are a traditional way to embellish a storefront. Awnings can also include signage. At the rear of buildings awnings can be an effective way to improve the general character of parking areas.

The color and style should be coordinated with the storefront and building facade. Use of a single awning for multiple storefronts is discouraged. Awnings should be proportioned to suit the building. The vertical drop of an awning is a critical element in determining whether it will appear properly proportioned when installed. Too short a vertical drop will make the awning appear insignificant within its opening. Too long a drop will start to obscure a large portion of the display window, especially when viewed from afar. Awnings should not cover important architectural details of the building.

Awning fabrics come in a variety of colors, patterns and finishes. Stripes or accent bands can easily be sewn to a solid color for a custom look. Fabric awning covers should be properly maintained and need to be replaced every two to three years, depending on color and fabric content. Internally illuminated, preformed awnings are discouraged.



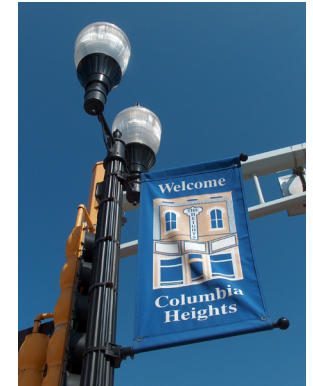
Awnings

Signs & Banners

Freestanding signs should be large enough to be seen from cars with single easy-to-read letters or images. Wall signs on multi-tenant buildings should be compatible with one another and should be scaled to be read from the parking lot.

Public kiosks or directory-style signage should be located in the central area of each pedestrian environment. The directory should list the location, name and type (restaurant, retail, office, service, etc.) of all of the businesses. Additional kiosks could be located at or near parking lots. The kiosks could dispense printed materials such as maps, business descriptions and promote local town events.

Commercial and business signage recommendations and guidelines will help enhance, complement and preserve the streetscape. Projecting signs, wall signs, awning signs, window signs, ground signs and sidewalk/sandwich signs serve both the motorist and pedestrian audience. However, it is important that the business community recognizes the importance of complying with signage requirements. Some of the purposes of the sign regulations are to preserve the value of private property by assuring compatibility of signs with surrounding land uses and also to enhance the physical appearance of the village. Likewise, the Town should work cooperatively with the downtown business community to enforce signage regulations in an equitable manner. Village banners are also a good method of introducing seasonal variations and promotions for downtown.



Signs & Banners

Goals

Needham's present zoning contributes to redevelopment barriers that exist in Needham Center. Under current zoning some downtown properties have a little room to expand, but most are already at or over their maximum development potential, as demonstrated in the Build-out Analysis under existing zoning (See Appendix).

In considering changes to existing zoning all stakeholders' priorities and concerns need to be taken into account. Stakeholders include downtown property owners, businesses, and residents, as well as developers, town boards and the entire community. These various stakeholder groups have been represented on the Needham Center Study Committee. In addition stakeholders have had the opportunity to provide input at the numerous public forums.

Based on this inclusive process the goals for new zoning include:

- Reduce barriers in the existing zoning.
- Encourage investment in new development and redevelopment of downtown properties.
- Protect the public interest in Needham Center as a vital, attractive business district.
- Provide for a fair, predictable development review and permitting system.
- Encourage a mix of uses including retail, services and housing.

Issues & Constraints

In reaching the goals established above, the following issues and constraints have been identified and addressed:

- Traffic and circulation;
- "Shape" and physical form of the downtown area;
- Parking supply, location and needs for various users;
- Existing property rights;
- Accounting for the value of existing built assets in the design of incentives to encourage redevelopment;
- Quality of life in adjacent residential neighborhoods.

Opportunities

The proposed new zoning takes advantage of the following identified opportunities to reach the goals stated above:

- Under utilized, obsolete or "tired" properties are given new incentives to encourage investment to redevelop.
- Adoption of design guidelines to further the village concept.
- A review process for projects in the downtown that provides reasonable guarantees to applicants following a clear and explicit set of criteria established in the new zoning and design guidelines.
- Revamping of off-street parking requirements and public-private responsibilities for adequate parking supply.

Priorities

The new zoning is based on the following priorities, recognizing the opportunities, issues and constraints and goals developed based on an inclusive process with feedback from all stakeholders:

- Support and enhancement of downtown as the commercial, cultural, social and civic center of the town.
- Improved appearance of buildings and sites.
- A pedestrian-friendly area and a vital business environment that gives people a reason to walk.
- Regulatory fairness. The new zoning should put in place a clear and predictable process for project review.
- Higher property values (and increased tax revenue) as a result of redevelopment.
- Downtown "living" with market-rate and affordable housing.
- Mandatory design guidelines in exchange for allowing more development and a broader range of use privileges including:
 - Taller buildings
 - More intensive use of existing properties
 - Market-rate or mixed-income housing
 - Some relief for parking obligations

Overlay Districts

The proposed new zoning focuses primarily on the creation of four new overlay districts as identified in the map to the right. The use of overlay districts in creating the new zoning was favored because they offer the following benefits:

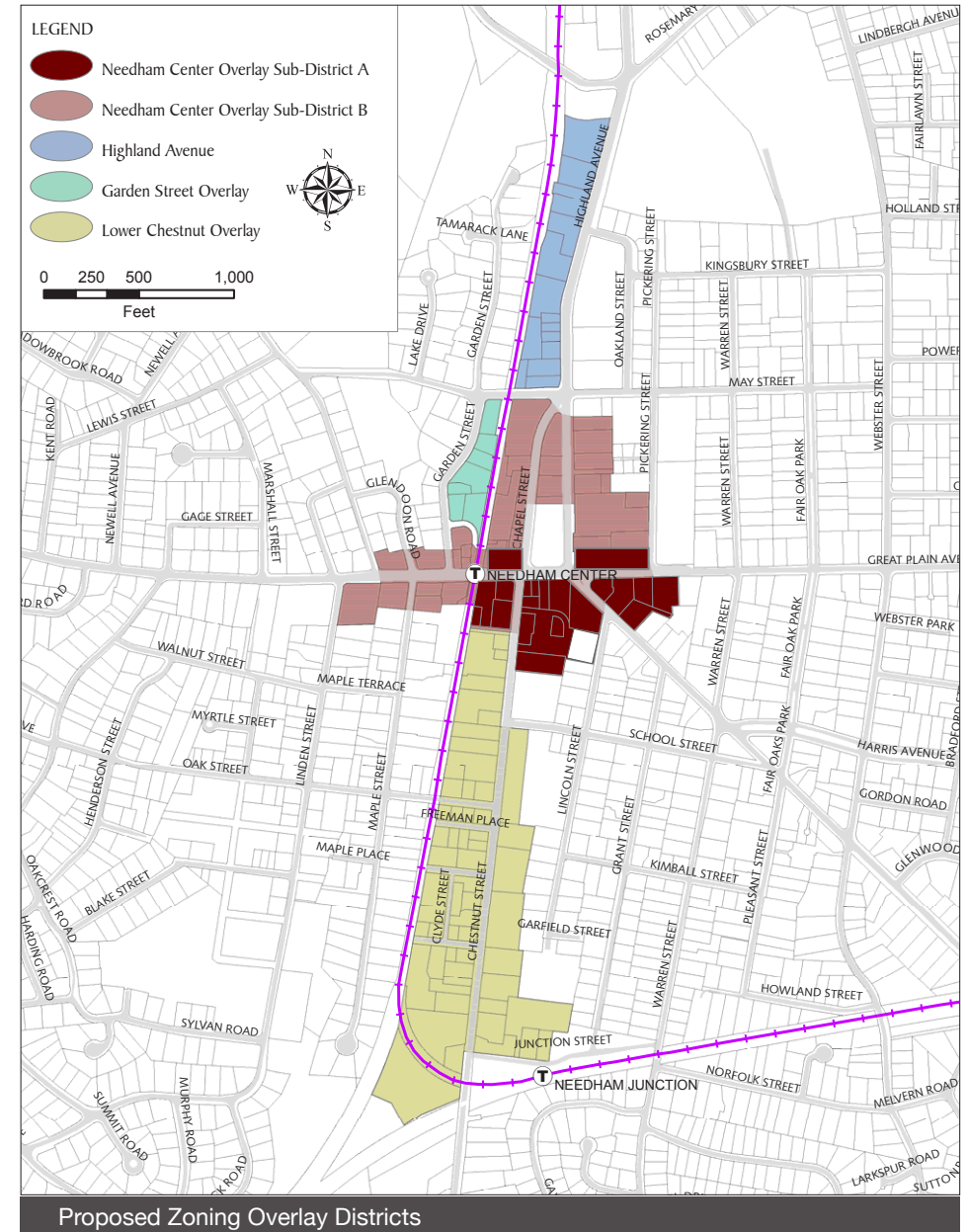
- Existing property rights are preserved.
- More choices are created.
- New development privileges are added under a different set of rules.
- More flexibility is provided to both applicants and town boards reviewing proposed projects.
- Overlay Districts do not have to follow existing zoning district boundaries.

Proposed Zoning

The proposed zoning is discussed below by district. The table on page 82 summarizes the proposed new overlay districts and the changes proposed for the Highland Avenue Business District and compares them to the existing zoning.

Needham Center

- Adds use regulations for five housing units by right, more units by special permit.
- Divides the Center Business District into two sub-districts in order to accommodate a maximum 4-story height along a portion of Great Plain Avenue and a maximum 3-story height in the rest of the Center Business District.
- Provides for significant increase in maximum FAR from 1.0 (existing) to 2.0 or 3.0 by special permit.
- Preserves existing side and rear setback rules for lots adjacent to residential districts except 10 FT setback for underground parking structures.



- Requires affordable housing units in mixed-use buildings with six or more housing units.

Chestnut Street

- Applies only to the Chestnut Street portion of the underlying Chestnut Street Business District.
- Allows taller buildings, but only on lots with frontage on Chestnut Street.
- Increases minimum lot size from 10,000 SF (existing) to 15,000 SF to encourage parcel assembly
- Increases minimum frontage from 80 FT to 100 FT to reduce the number of curb cuts.
- The minimum and maximum front setbacks, required at “build to” line along a majority of lot frontage.
- Preserves existing side and rear setback rules for lots adjacent to residential districts except for:
 - Lots adjacent to residential districts have a setback of 10 FT for underground parking structures.
 - Lots adjacent to MBTA Right of Way have a 25 FT setback composed of 10 FT for landscape buffer (or landscaped surface parking by special permit) and 15 FT for accessory uses excluding structures (10 FT setback for underground parking also allowed).
- Increases maximum FAR from 0.70 (existing) to 1.5 by right and 2.0 by Special Permit.

Garden Street

- Applies only to the Garden Street portion of the

underlying Chestnut Street Business District. Not as use-intensive as the Chestnut Street Overlay District.

- Restaurants and retail use allowed only by Special Permit.
- Multi-family dwellings allowed by Special Permit.
- Minimum lot size in the overlay district is increased from 10,000 SF (existing) to 15,000 SF to encourage parcel assembly.
- Increases maximum FAR from 0.70 (existing) to 1.0 (Multi-family)/1.2 (All other allowed uses) by Special Permit.

Highland Avenue Business District

- No overlay district created here.
- Highland Avenue Business District replaces Business District.
- Proposed regulations are primarily a “clean-up” of existing dimensional rules in order to achieve consistency with Needham’s other business districts.
- FAR of 1.0 added.

Parking Waivers & Off-Street Parking Fund

The proposed zoning allows applicants to request a waiver from strict compliance with off-street parking requirements. The Planning Board may grant a Special Permit provided that the applicant makes a mitigation payment to the Off-Street Parking Fund. Mitigation payments are to be based on a “cost per space” formula. The revenue from these payments

may be used as contribution toward the design/construction of new parking facilities, to lease existing parking spaces, or for parking management. The objectives are to facilitate redevelopment and enlist private sector assistance with increasing the supply of public parking.

Affordable Housing

There was considerable input regarding affordable housing. Based on a consensus of opinion the proposed zoning requires affordable housing in larger (6+) unit, mixed-use or multifamily developments. This is in support of Needham’s Housing Plan. Affordable units will “count” on its Subsidized Housing Inventory.

Outdoor Display

There is currently no procedure for the approval of outdoor display of retail goods, which historically has been an integral part of the way stores operate in a downtown business district. There is proposed zoning to address outdoor display and also proposed changes to the general bylaws regarding the administrative procedures related to outdoor display.

Summary

The table on the following pages summarizes the proposed zoning changes to be brought before the May 2009 Town Meeting and compares them with the existing zoning. The actual proposed zoning language is included in the Appendix.

Summary of Existing and Proposed Zoning

Dimensional Standard	EXISTING			PROPOSED			
	Center Business	Chestnut Street	Business	Needham Center Overlay	Lower Chestnut Street Overlay	Garden Street Overlay	Highland Avenue Business
Minimum Lot Area	10,000 sq. ft.	10,000 sq. ft.	10,000 sq. ft.	10,000 sq. ft.	15,000 sq. ft.	15,000 sq. ft.	10,000 sq. ft.
Minimum Frontage	80 feet	80 feet	80 feet	80 feet	100 feet	80 feet	80 feet
Maximum Building Height: By Right	35 feet 2.5 stories	35 feet 2.5 stories	40 feet 3 stories	<u>Sub-District A</u> 35 feet 2.5 stories <u>Sub-District B</u> 2.5 stories 35 feet	35 feet 2.5 stories	35 feet 2.5 stories	40 feet 3 stories
Maximum Building Height: By Special Permit	N/A	N/A	N/A	<u>Sub-District A</u> 37 feet, 3 stories or 48 feet 3+1 stories <u>Sub-District B</u> 37 feet 2+1 stories	For lots with frontage on Chestnut St: 37 feet 3 stories or 48 feet 3+1 stories	37 feet 2+1 stories	N/A
<u>Minimum</u> Building Height	N/A	N/A	N/A	Sub-District A: 2 stories, 27 feet	N/A	N/A	N/A
Floor Area Ratio: By Right	1.0 or as existing on 1/1/90, whichever is greater	0.7	N/A	Same as Center Business	0.7	0.7 by right	1.00
Floor Area Ratio: By Special Permit				2.0 <u>or</u> 3.0	For lots with frontage on Chestnut Street: 1.5 <u>or</u> 2.0	1.0 for multi-family 1.2 for other uses	N/A

Summary of Existing and Proposed Zoning

Dimensional Standard	EXISTING			PROPOSED			
	Center Business	Chestnut Street	Business	Needham Center Overlay	Lower Chestnut Street Overlay	Garden Street Overlay	Highland Avenue Business
Front Setback	Minimum 3 feet, or Average of adjacent setbacks, whichever is smaller	Minimum 20 feet	Minimum 10 feet for lots existing on 4/14/52	Minimum 0 feet	Minimum 5 feet or Average of setbacks within 100 feet, whichever is smaller	Minimum 10 feet or Average of setbacks within 100 feet, whichever is smaller	Minimum 0 feet
Side and Rear Setback Adjacent to Residential Zones	Minimum 50 feet, including 25-ft. landscaped buffer closest to residential boundary	Minimum 50 feet, including 25-ft. landscaped buffer closest to residential boundary	50 feet for lots rezoned to B District after 4/15/52	Same as Center Business; except minimum setback 10 feet for underground parking structure	<p>Same as Chestnut Street except:</p> <p><u>Lots adjacent to residential districts</u> *Minimum setback 10 feet for underground parking structure</p> <p><u>Lots adjacent to MBTA ROW</u> *Minimum setback 10 ft. for underground parking structure *Minimum 25-ft. setback composed of: (a) 10-ft. landscaped buffer or, by special permit, surface parking if landscaped and (b) 15 ft. for accessory uses, excluding buildings or structures.</p>	Minimum 10 feet side and rear	Same as existing
Building Coverage	N/A	N/A	Varies by class of use and building height, from 35% to 45%	N/A	N/A	N/A	N/A

Summary of Existing and Proposed Zoning

Dimensional Standard	EXISTING			PROPOSED			
	Center Business	Chestnut Street	Business	Needham Center Overlay	Lower Chestnut Street Overlay	Garden Street Overlay	Highland Avenue Business
Enclosed Parking	Included within FAR calculation with exception of underground parking exclusion by Special Permit; certain design standards also apply	Included within FAR calculations	Coverage increase by 2.5% for each 1 sq. ft. of enclosed parking	Underground parking exempt from FAR	Underground parking exempt from FAR	Underground parking exempt from FAR	N/A
Basic Off-Street Parking Requirements	Per ZBL Section 5.1.2	Per ZBL Section 5.1.2	Per ZBL Section 5.1.2	Per ZBL Section 5.1.2 except: * No parking required for retail <800 sq. ft. * Reduced parking for buildings with more than 40% of floor area located in upper stories * Bike racks required for residential uses * Payment in lieu of parking spaces to Needham Center Off-Street Parking Fund	Same as Needham Center Overlay	Same as Lower Chestnut Overlay	Per ZBL Section 5.1.2 (no change proposed)

Action Plan

*In many ways it is easier for a community to come together and agree upon a vision for their town than it is for them to figure out an equitable way to implement that vision.**

This chapter proposes an implementation schedule to shift from the “What” for Needham Center to the “How”. Implementation must be a multi-pronged approach that is persistent in effort, focused on goals and flexible in response to changing community needs.

It is also imperative that town officials keep the vision of a successful and vibrant village environment alive in the main stream of community awareness. The momentum of the study and the action that follows should be as seamless as possible. A follow-up “Action Committee” or some other mechanism to maintain momentum in this implementation process is essential. Otherwise it is all planning and no action. This will be a journey with celebrations for success and adjustments to setbacks. Commitment and persistence must invigorate the process. Like all things in life, you are growing or you are dying. This implementation requires the same nurturing in order to grow.

The implementation schedule below is divided into Early Action, Mid-Term and Long-Term phases. This schedule is a compilation of recommendations from the study and available information on private

* MIT Study 2003

sector projects.

This implementation schedule includes general planning activities that serve to coordinate the various projects. Project opportunities are organized by public projects, public/private partnerships and private development. The implementation schedule is front loaded in the Early Action phase with planning and projects to kick start redevelopment efforts. Work initiated in the Early Action Phase will be continued in the successive phases as discussed below.

EARLY ACTION 2008 - 2009

The Early Action Phase includes both activities already underway and those targeted for catalyzing town center redevelopment.

Planning

Zoning

The proposed zoning changes discussed in the previous chapter will be brought before Town Meeting in the Spring of 2009. The Needham Center Study Committee, the Planning Board and planning department will take the lead in generating support for zoning from the various stakeholder groups.

Economic Development Specialist

In 2007 the Town hired a full-time economic development specialist charged with developing short and long-term economic development strategies, part of which will be focused on



Needham Center. The economic development specialist’s responsibilities includes working with town departments to streamline permitting procedures where they have been identified as barriers to appropriate business development.

Needham Center Action Committee

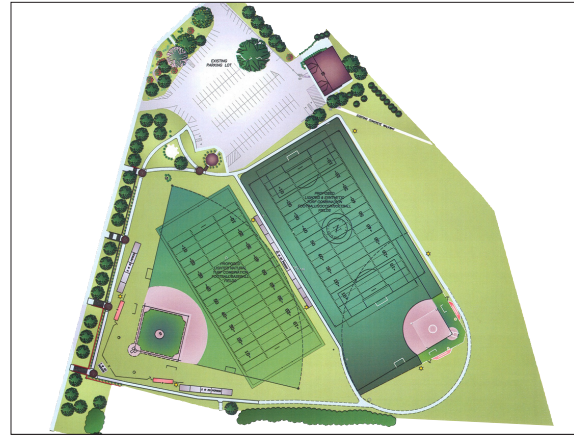
It is recommended that the Planning Board take the lead on creating a committee to track the various projects in support of a revitalized downtown, evaluate progress and provided any required course corrections on an annual basis.

Funding

Needham has adopted the Community Preservation Act (CPA) and CPA funds may be used for open space, historic preservation and low-to-moderate income housing. While there is a potential to



Proposed Streetscape at Memorial Park



Proposed Fields at Memorial Park

utilize CPA funding, town officials must clarify the eligibility of these public funds for proposed downtown improvements. It has been determined that CPA funding can be utilized for a portion of the Town Hall project discussed below.

Public Projects

Town Hall & Town Common

The planning for this project is currently underway. Spring Town Meeting 2008 approved funding for the design phase. Options under consideration include the benefits of keeping essential core services and personnel downtown and restoring the historic Great Hall, which would provide downtown with a public auditorium. These attributes are in support of the vision for Needham Center to enhance, preserve and expand the civic presence of Town

Hall and provide a multi-use community space downtown. Although not yet focused on, planning for improvements to Town Common will be prompted by the Town Hall project.

Senior Center

The long delayed senior center project is still in need of a location, but there is a strong preference among stakeholders for it to be within the downtown. Feasibility study funding was voted at the fall Town Meeting 2008.

Memorial Field

Construction and related field improvements were completed in the fall 2008.

Road and Sidewalk Improvements

The DPW's Infrastructure Capital Improvement

Plan for replacing aging water and gas mains and surface improvements should be coordinated with the Traffic and Pedestrian Circulation Recommendations (included in the Appendix) and a phasing plan should be prepared. As noted in these recommendations, Chestnut Street Reconstruction and the DPW's planned infrastructure improvements (paving, curbs, utilities, etc.) provide opportunities to:

- Consolidate parking access with shared driveways for abutting lots.
- Create a consistent street width (it currently varies) and widen sidewalks for trees and landscaping.
- Remove, whenever possible, utility poles and extend a consistent design for new light fixtures.
- Provide curbing and sidewalks of consistent design throughout Chestnut Street. Whenever possible, widen sidewalks and/or remove barriers as part of public construction.

Traffic Signal Upgrades

Initial design and engineering should be started under the purview of the DPW for coordination of the upgrading of traffic signals at the six locations identified in this study. At a minimum, the new signal at the intersection of Chestnut and School Streets will be installed as part of the Hospital

Expansion project discussed below.

Infrastructure Capital Improvements - Utilities, Roads and Sidewalks

It is recommended that the initial phase of work be adjacent to Town Common and coordinated with the Town Hall & Town Common work discussed above. These combined improvements, focused on the center of downtown, will serve as a catalyst for improvements extending outward from this hub.

Lower Chestnut Street Road and Sidewalk Improvements

Although this project had been designed prior to finalizing the Traffic and Pedestrian Circulation Recommendations Plan, it incorporates most of these recommendations to the extent possible. This project includes Chestnut Street from Marsh Road south to Dover.

Public/Private Partnerships Streetscape Improvements

A plan should be put in place through the economic development office to inventory and prioritize streetscape improvements including lighting, street signage, benches, trees, planters, trash containers, parking and curbing. This work will be coordinated the road and sidewalk improvements discussed above. Feedback should be solicited from store owners. Part of this planning effort should include establishing a maintenance fund for upkeep, repairs and replacement of streetscape items.

An important contributor to streetscape improvements is the Needham Community Revitalization Trust Fund (NCRTF) which channels private funding to town beautification projects in support of the streetscape improvements outlined in this study. Its most recent project is improvements to the “Willet & Chadwick Coal Co.” alleyway, which provides a pedestrian link to the Center Station parking.

As a complement to the streetscape improvements outlined above, there should be a concerted effort to take advantage of design and economic incentive programs (state referral) to encourage store owners to improve storefronts such as awnings, signage, window fronts, etc. without significant construction costs. The economic development office would again be an appropriate coordinator for this effort.

Parking Consolidation Projects

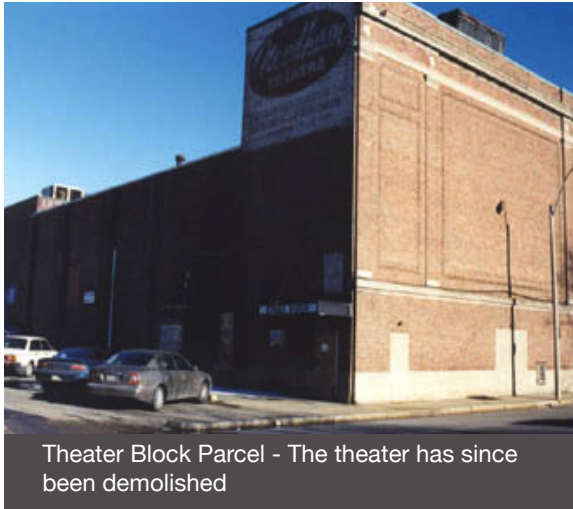
In the near term the focus for off-street parking will be the consolidation of existing parking. The parking lot behind CVS at Chestnut Street and Dedham Avenue is a successful example of a creative solution involving private and public entities. The final product results from creative thinking, persistence and limited capital funds. It is an excellent example of consolidated parking.

Opportunities for consolidation throughout the downtown have been identified in the study (See the Traffic and Pedestrian Circulation



Recommendations Plan in the appendix). Town Meeting established in spring 2008 an off-street parking fund to work with the proposed zoning as discussed in the previous chapter. Proceeds from this fund can be used for parking consolidation and management in addition to the development of a parking garage. Additional strategies include:

- Signage to identify parking options and to differentiate between public and private parking.
- Establishment of a formal program for shared parking with written contracts between private and public shareholders.
- Incentives to encourage re-orienting customer parking from the front to the sides or rear of retail spaces.
- Limitations on commuter parking at Needham Center Station; use of pricing strategies and in-



Theater Block Parcel - The theater has since been demolished

creased enforcement to divert commuters to other stations; encouragement to businesses to limit the number of employees who drive to work.

- Provisions of economic or development incentives for the assemblage of private and public parcels for larger, more effective parking lots.

The office of economic development would be an appropriate agency to further identify, prioritize and manage pursuit of these opportunities.

Private Development Projects

The following projects are either underway or have the possibility of starting during this Early Action Phase.

Hospital Expansion, Phase 1

Beth Israel Deaconess Hospital-Needham is adding

30,000 SF to the existing 80,000 SF facility. As part of this project the emergency room entrance is being moved from Lincoln Street in the adjacent Residential District to a more appropriate location on Chestnut Street. The Hospital is paying for the installation of a stoplight at Chestnut and School Streets to improve traffic flow in the area and upgrading on-site parking. The hospital expansion will be a stimulus for additional supporting medical office space in the downtown. This project is scheduled for completion in fall 2009.

Roche Brothers Supermarket Site Improvements

In response to the Lower Chestnut Street Reconstruction project, Roche Brothers is planning improvements to its parking lot. The DPW is working with Roche Brothers to reduce curb cuts at this location in support of the Traffic and Pedestrian Circulation Recommendations.

Theater Block Redevelopment

The Theatre Block on Dedham Avenue and Great Plain Avenue has a new owner who is interested in mixed-use (retail/housing) with expectations for maximizing development potential (four stories). Preliminary discussions indicate a willingness to maximize development consistent with the principles of the Concept Plan. This location is unique in terms of the immediacy of the development and its critical location in the Center Business District. Although the timeline for this project is not known it is anticipated that planning

will begin after the new zoning regulations have been implemented.

Walgreens Property

The Town through the economic development office should encourage site improvements at the Walgreens Property as suggested in the Road & Sidewalk Recommendations Plan to enhance pedestrian links extending out from Town Hall.

MID-TERM 2010 - 2014

The mid-term phase will build on the planning initiated and projects started during the Early Action phase.

Planning

Five-Year Review, Evaluation and Course Corrections

By the end of 2013 the Needham Center Action Committee should review the status of the collective efforts toward downtown redevelopment. To this end it is recommended that a community workshop be held to present this status report to the community and solicit stakeholder input. This is an opportunity for making adjustments to the implementation plan if they are determined to be necessary.

Public Projects

Road and Sidewalk Improvements

Work should continue on successive phases of Road & Sidewalk Improvements as prioritized by the

DPW during planning in the Early Action phase.

Traffic Signal Upgrades

The goal should be to complete the traffic signal upgrades by the end of the Five-Year phase.

Infrastructure Capital Improvements - Utilities, Roads and Sidewalks

Successive phases of this work should build on work initiated adjacent to Town Common. A goal should be to complete the Center Business District improvements within the Five Year milestone and to have begun phases for the remaining work in the Highland Avenue Business, Lower Chestnut Street and Garden Street districts.

Parking

Needham Junction Station Parking

Needham should become an active participant with state officials in planning for public transit development including appropriate parking. Redevelopment of Needham Junction Station with the MBTA should be explored with the goal of increasing this station's use as a "park-and-ride" location.

Emery Grover Building

This town building, currently housing the school administration offices, is an asset that can be redeveloped for either public or private use to enhance Highland Avenue and bring more activity to downtown. An evaluation should be made during this Five-Year phase of the best use alternatives for

this property.

Public/Private Partnerships

Work should continue on successive phases of streetscape improvements and parking consolidation projects to be coordinated and prioritized with the public work being done on road and sidewalk improvement projects.

Private Development Projects

Theater Block Redevelopment

If all goes well, this project will be completed during the early action phase and the resulting project would be one of the first to enjoy the benefits of the new development opportunities for the developer in exchange for public benefits for the downtown. The success of this project will be a catalyst for additional development.

Hospital Expansion, Phase 2

Phase 2 of the hospital expansion is scheduled for completion during the Five-Year phase. Plans for Phase 2 are not definitive but would likely maximize development capacity on the hospital site. The additional expansion would also spur development of additional supporting medical office space.

Walgreens Property

In addition to the site improvements discussed earlier there may be additional opportunities for expansion on this large property that become apparent during this Five Year Phase.



Improvements to Walgreens Property

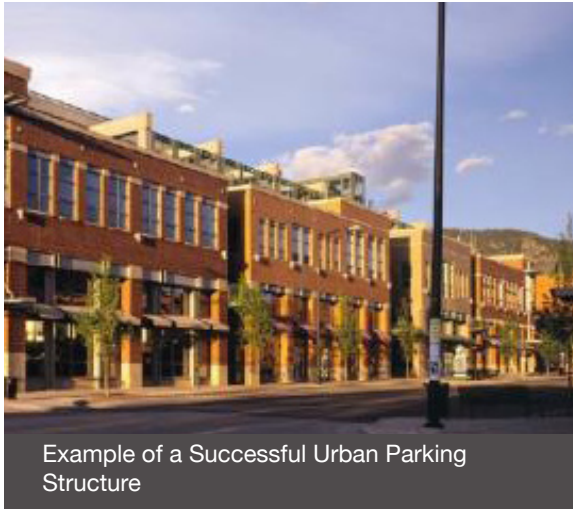
LONG-TERM PHASE 2015 - 2028

The Long-Term phase will see completion of projects initiated in the previous two phases as well as the appearance of new opportunities for public and private projects that build on redevelopment projects already completed.

Planning

Ten and 15 Year Review, Evaluation and Course Corrections

The Needham Center Action Committee should schedule 10 and 15 year milestone reviews of the status of collective efforts toward downtown redevelopment.



Example of a Successful Urban Parking Structure

Public Projects

Needham Center Station

Redevelopment of Needham Center Station with the MBTA should be explored with the goal of increasing this station's use as a short-term parking location.

Road and Sidewalk Improvements

Work should be completed on Road and Sidewalk Improvements as prioritized by the DPW during planning in the Early Action phase.

Infrastructure Capital Improvements - Utilities, Roads and Sidewalks

The remaining work in the Highland Avenue Business, Lower Chestnut Street and Garden Street districts should be completed during this phase.

Public/Private Partnerships

Work should be completed on final phases of streetscape improvements and parking consolidation projects to be coordinated and prioritized with the public work being done on road and sidewalk improvement projects.

Parking Structure

With the extensive redevelopment of Needham Center outlined above, it is possible that there will be impetus for a parking structure. The need for a parking structure should be tracked by the Needham Center Action Committee and if appropriate, a project should be pursued.

Private Development Projects

Within the next twenty years there certainly will be additional private development opportunities that have not even been thought of at this point in addition to the projects identified below.

Hospital Parking Lot

The three hospital-owned lots across Chestnut Street are currently used as a parking lot. The size, location and undeveloped status of these adjacent parcels will afford a range of opportunities to take advantage of the new zoning and redevelopment activity that has occurred. Opportunities for this site should be tracked by the economic development office.